



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:27-06-2020

| | | | |
|------------------|----------------------------------|-----------------|-----------|
| Department | COMPUTER SCIENCE AND ENGINEERING | Application No. | 20200154 |
| Area of Research | MACHINE LEARNING | Research Mode | PART TIME |

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| | | | |
|---|--------------------|---|--------------------------|
| Father's/Husband's Name | S S CHALAPATHI RAO | Father's/Husband's Occupation | RETIRED RAILWAY EMPLOYEE |
| Family Income | 850000 | Residential Type | URBAN |
| Birth Place | GUNTUR | Mother Tongue | TELUGU |
| Religion | HINDU | Martial Status | SINGLE |
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| Physically Challenged | NO | Type of Disability | - |
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| Qualification | | | | | | |
|---------------|-----------------------|--|-------------|----------|-----------|---------|
| Degree | Discipline | College/university | Year Passed | AVG/CGPA | Class | Mode |
| SSC | SSC | CHINMAYA HIGH SCHOOL | 1998 | 82.3 | 1ST CLASS | REGULAR |
| INTER | BOARD OF INTERMEDIATE | GOWTHAM JUNIOR COLLEGE | 2000 | 81 | 1ST CLASS | REGULAR |
| BTECH | CSE | BHARAT INSTITUTE OF SCIENCE AND TECHNOLOGY | 2006 | 53.2 | 2ND CLASS | REGULAR |
| MTECH | SOFTWARE ENGINEERING | AURORAS ENGINEERING COLLEGE | 2008 | 63.8 | 1ST CLASS | REGULAR |

| Experience | | | | |
|--|---------------------|-----------------|---------------|-------------|
| Organization | Designation | Experience From | Experience TO | Work Nature |
| CVSR COLLEGE OF ENGINEERING, HYDERABAD | ASSISTANT PROFESSOR | 2009-06-18 | 2010-06-24 | TEACHING |
| SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, HYDERABAD | ASSISTANT PROFESSOR | 2010-07-09 | 1970-01-01 | TEACHING |

| Payment Details | | | | |
|-----------------------|----------------|---------------------|--------|---------|
| Transaction ID | Reference | Date of transaction | Amount | Status |
| 20200154_200630164630 | SHMP8947853749 | 30-06-2020 | 600 | SUCCESS |

SYNOPSIS OF THE PROPOSED RESEARCH WORK

ON

**A Novel Approach for Recommender Systems in Education
using Machine Learning**

Submitted By

Name:S Chandra Sekhar

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ABSTRACT

Recommender systems are widely used in many areas, especially in e-commerce. However, there is limited information of the impact of recommender systems in other domains like education. Recently, they are also applied in e-learning tasks such as recommending resources (e.g. papers, books,..) to the learners (students). In this work, I propose a novel approach which uses recommender system techniques for educational data mining, to best utilize the time and predict the most important questions. Generally, students have to study the entire syllabus to perform very good in academic exams. Not many perform well in doing so, and end up getting less marks. With this kind of recommender system student can practise only those questions which are mostly certainly to be coming in the exam. Given the time limit, the system will detail all the important questions to be learned so that he will gain maximum marks under the given time constraint. This is achieved by ranking all the questions of a topic according to the probability of their occurrence in the exam. By this, within less amount of time the student can learn all the important questions and their by the overall student performance will be hugely increased.

Keywords: recommender systems, matrix factorization, ,educational datamining, probability of important questions.

1. INTRODUCTION

Systems that retrieve and filter the data through content and similar profiles are known as recommendation systems (RS). These systems are usually used within the e-commerce domain. For example, some websites, such as Amazon, through the application of RS allow offering the user recommendations for products that users do not know and could be of their interest. Suggested recommendations help to overcome the distressing search problem for the user. But this technology is not only used to sell products, but it is also used to suggest videos (YouTube), movies (Netflix), friends (Facebook), among others. This demand spans across several domains, among which is the educational domain. RS, which are applied in education, have the role of supporting teaching and learning activities through enhanced information retrieval. Nevertheless, there is limited information of the application of recommender systems in educational environments.

Educational data mining has also been taken into account recently. Since the universities desire to improve their educational quality, the usage of data mining in higher education to help the universities, instructors, and students to improve their performance has become more and more attractive to both university managers and researchers. For example, to help improving the student performance, some research questions should be explored such as how the students learn (e.g. generally or narrowly)? How quickly or slowly the students adapt with the new problems? This work proposes a novel approach which applies recommender system techniques for improving student performance.

2.LITERATURE SURVEY

As surveyed in Manouselis et al. [3], many recommender systems have been deployed in technology enhanced learning. Concretely, García et al. [4] uses association rule mining to discover interesting information through student performance data in the form of IF-THEN rules, then generating the recommendations based on those rules; Bobadilla et al. [9] proposed an equation for collaborative filtering which incorporated the test score from the learners into the item prediction function; Ge et al. [10] combined the content-based filtering and collaborative filtering to personalize the recommendations for a courseware selection module; Soonthornphisaj et al. [11] applied collaborative filtering to predict the most suitable documents for the learners; while Khribi et al. [12] employed web mining techniques with content-based and collaborative filtering to compute the relevant links for recommending to the learners.

In predicting student performance, Romero et al. [8] compared different data mining methods and techniques to classify students based on their Moodle usage data and the final marks obtained in their respective courses; Bekele and Menzel [6] used Bayesian Networks to predict student results; Cen et al. [15] proposed a method for improving a cognitive model, which is a set of rules/skills encoded in intelligent tutors to model how students solve problems, using logistic regression; Thai-Nghe et al. [7] analyzed and compared some classification methods (e.g. decision trees and Bayesian networks) for predicting academic performance; while Thai-Nghe et al. [6] proposed to improve the student performance prediction by dealing with the class imbalance problem. (i.e., the ratio between passing and failing students is usually skewed).

Different from the literature, instead of using traditional classification or regression methods, we propose using state of the art techniques in recommender systems (e.g. matrix factorization) for predicting student performance.

3. OBJECTIVE OF THE PROPOSED RESEARCH WORK

1. The main objective of the work is to guide the student with all the important questions he/she has to learn in a specified amount of time thus improve the student performance.

2. To view how many peer members are currently reading which topic and which question.

4. STUDY AREA AND METHODOLOGY

let S be a set of student IDs, T be a set of task IDs and, $f \subseteq \mathbb{R}$ be a performance measure, then $D \subseteq (S \times T \times f)$ is the triple data collected from the study application which the student uses. f indicates the probability of each question under a topic. Given $s \in S$ and $t \in T$, our problem is to predict f . Obviously, in a recommender system context, s, t , and f would be user, item, and rating/probability, respectively. The recommender system task at hand is thus rating/probability prediction.

Proposed Technique:

Traditionally, recommender systems focus on reducing the information overload and act as information filters. The most famous recommender system and indeed one of the first commercial recommender system at all is the Amazon's "Customers Who Bought This Item Also Bought". The aim of recommender system is making vast catalogs of products consumable by learning user preferences and applying them to items formerly unknown to the user, thus being able to recommend what has a high likelihood of being interesting to the target user.

The two most common tasks in recommender systems are Top-N item recommendation where the recommender suggests a ranked list of (at most) N items $i \in I$ to a user $u \in U$ and rating prediction where the aim is predicting the preference score (rating) $r \in \mathbb{R}$ for a given user-item combination. For item recommendation the training data is currently usually unary information on items being viewed, clicked, purchased etc. by the respective users. Rating prediction mainly uses rating information itself as training data.

Collaborative Filtering :

In the early days of recommender systems, content was deemed very valuable training data and research data sets contained lots of attribute information for algorithm training. But since the late nineties the so called collaborative filtering approach prevails. Collaborative filtering is based on the assumption that similar users like similar things and, being content-agnostic, focuses only on the past ratings assigned. In this work, we make use of matrix factorization (Rendle and Schmidt-Thieme [13], Koren et al. [2]), which is known to be one of the most successful methods for rating prediction, outperforming other state-of-the-art methods (Bell and Koren [14]).

Matrix Factorization :

Matrix factorization is the task of approximating a matrix X by the product of two smaller matrices W and H , i.e. $X \approx WH^T$ (Koren et al. [2]). In the context of recommender systems the matrix X is the partially observed ratings matrix, $W \in \mathbb{R}^{U \times K}$ is a matrix where each row u is a vector containing the K latent features describing the user u and $H \in \mathbb{R}^{I \times K}$ is a matrix where each row i is a vector containing the K features describing the item i . Let w_{uk} and h_{ik} be the elements of W and H , respectively, then the rating given by a user u to an item i is predicted by:

$$\text{RMSE} = \sqrt{\sum_{ui} (r_{ui} - \hat{r}_{ui})^2} / n . \text{ where } n \text{ is the number of test cases.}$$

Data Set: There is no existing data set that we can use to analyse the results. we have to build our own data set once the students use the application which we develop.

Mapping Educational Data to Recommender Systems

In traditional recommender systems settings, it is unambiguous how the available information is mapped to users, items, and ratings, respectively. At least for all major recommender system data sets used (Jester, MovieLens 100k, and Netflix) there is a unique assignment³.

In our Model there is an obvious mapping of users and probability of question being asked in the exam.

student \Rightarrow prepares the questions which have higher probability \Rightarrow Probability of question

The student becomes the user, and the probability of a question would become the probability of the question, bounded between 0 and 1.

For mapping the item, several options seemed to be available. One possible option is an item was supposed to be the combination (concatenation) of problem hierarchy (PH), problem name (PN), step name (SN), and problem view (PV), Available time(AT), Frequency of the problem(FP).

5. EXPECTED OUTCOME

The proposed Matrix Factorization model will classify the questions and predict all the important questions to be studied by the student in order to secure more marks in the exam.

REFERENCES

- [1] Nguyen Thai-Nghe*, Lucas Drumond*, Artus Krohn-Grimberghe*, Lars Schmidt-Thieme, Recommender System for Predicting Student Performance, *Procedia Computer Science*.
- [2] Y. Koren, R. Bell, C. Volinsky, Matrix Factorization Techniques for Recommender Systems, *IEEE Computer Society Press* 42 (8) (2009) 30–37, ISSN 0018-9162.
- [3] N. Manouselis, H. Drachler, R. Vuorikari, H. Hummel, R. Koper, Recommender Systems in Technology Enhanced Learning, in: Kantor, P.B., Ricci, F., Rokach, L., Shapira, B. (eds.) *1st Recommender Systems Handbook*, Springer-Berlin, 1–29, 2010.
- [4] E. García, C. Romero, S. Ventura, C. D. Castro, An architecture for making recommendations to courseware authors using association rule mining and collaborative filtering, *User Modeling and User-Adapted Interaction* 19 (1-2).
- [5] H. Cen, K. Koedinger, B. Junker, Learning Factors Analysis A General Method for Cognitive Model Evaluation and Improvement, in: *Intelligent Tutoring Systems*, vol. 4053, Springer Berlin Heidelberg, ISBN 978-3-540-35159-7, 164–175, 2006.
- [6] R. Bekele, W. Menzel, A Bayesian Approach to Predict Performance of a Student (BAPPS): A Case with Ethiopian Students, in: *Artificial Intelligence and Applications*, Vienna, Austria, 189–194, 2005.
- [6] N. Thai-Nghe, A. Busche, L. SchmidThieme
Improving Academic Performance Prediction by Dealing with Class Imbalance
in: *Proceeding of 9th IEEE International Conference on Intelligent Systems Design*

- and Applications (ISDA'09), Pisa, Italy, IEEE Computer Society, 878–883, 2009.
- [7] N.ThaiNghe,P.Janecek,P.Haddawy,AComparativeAnalysisofTechniquesforPredictingAcademicPerformance,in:Proceedingof37th IEEE Frontiers in Education Conference (FIE'07), Milwaukee, USA, IEEE Xplore, T2G7–T2G12, 2007.
 - [8] C.Romero,S.Ventura,P.G.Espejo,C.Hervs,DataMiningAlgorithmstoClassifyStudents,in:1stInternationalConferenceonEducational Data Mining (EDM'08), Montral, Canada, 8–17, 2008.
 - [9] J. Bobadilla, F. Serradilla, A. Hernando, Collaborative filtering adapted to recommender systems of e-learning, *Knowledge-Based Systems* 22 (4) (2009) 261–265, ISSN 0950-7051. *T.-N. Nguyen et al. / Procedia Computer Science 1 (2010) 2811–2819* 2819 *N. Thai-Nghe, L. Drumond, A. Krohn-Grimberghe, and L. Schmidt-Thieme / Procedia Computer Science 01 (2010) 1–9* 9
 - [10] L. Ge, W. Kong, J. Luo, Courseware Recommendation in E-Learning System, in: *International Conference on Web-based Learning (ICWL'06)*, 10–24, 2006.
 - [11] N.Soonthornphisaj,E.Rojsattarat,S.Yim-ngam,SmartE-LearningUsing RecommenderSystem, in:*InternationalConferenceonIntelligent Computing*, 518– 523, 2006.
 - [12] M.K.Khribi,M.Jemni,O.Nasraoui,AutomaticRecommendationsforE-LearningPersonalizationBasedonWebUsageMiningTechniques and Information Retrieval, in: *Proceedings of the 8th IEEE International Conference on Advanced Learning Technologies*, IEEE Computer Society, 241–245, 2008.
 - [13] S. Rendle, L. Schmidt-Thieme, Online-updating regularized kernel matrix factorization models for large-scale recommender systems, in: *Proceedings of the ACM conference on Recommender Systems (RecSys'08)*, ACM, New York, USA, 251–258, 2008.
 - [14] R. M. Bell, Y. Koren, Scalable Collaborative Filtering with Jointly Derived Neighborhood Interpolation Weights, in: *Proceedings of the 7th IEEE International Conference on Data Mining (ICDM'07)*, IEEE CS, Washington, USA, ISBN 0-7695-3018-4, 43–52, 2007.
 - [15] T. Tang, G. McCalla, Smart Recommendation for an Evolving E-Learning System: Architecture and Experiment, *International Journal on E-Learning* 4 (1) (2005) 105–129, ISSN 1537-2456.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY



HYDERABAD, ANDHRA PRADESH, INDIA

College Code: E1 (B I E T, IBRAHIMPATNAM)

Mr. S Chandrasekhar
S/o S Seshachalapathi Rao

having fulfilled the academic requirements and passed the examination
held during *May - 2006* in *** Second Class ***
has this day been admitted by the Executive Council to the Degree of

Bachelor of Technology
(Computer Science & Engineering)

Given under the Seal of the University

H.T.No : 01E11A0506

Date : 30 March, 2007

0650523

[Signature]
Controller of Examinations

[Signature]
Director of Evaluation

[Signature]
Registrar



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
HYDERABAD - 500 072.
ANDHRA PRADESH, INDIA

CONSOLIDATED MARKS MEMO / CREDIT SHEET

CMM No: A 093088

Bachelor of Technology in **COMPUTER SCIENCE & ENGINEERING**

Serial No.: **513340277245**
Name: **S CHANDRASEKHAR**
Hall Ticket No.: **01E11A0506**

Year of Admission **2001-2002**

Name of the College: **BIET, IBRAHIMPATNAM**
Month & Year of Final Exam: **May, 2006**
Class Awarded: ***** SECOND CLASS *****

| S.No. | COURSE TITLE | INTERNAL MARKS | EXTERNAL MARKS | TOTAL | CREDITS | S.No. | COURSE TITLE | INTERNAL MARKS | EXTERNAL MARKS | TOTAL | CREDITS |
|-------|--------------|----------------|----------------|-------|---------|-------|--------------|----------------|----------------|-------|---------|
| | THEORY Max. | 20 | 80 | 100 | | | THEORY Max. | 20 | 80 | 100 | |
| | LAB | 10 | 40 | 50 | | | LAB | 10 | 40 | 50 | |

I YEAR

| | | | | | | | | | | | |
|---|-------------------------------------|----|----|----|---|----|------------------------------------|----|----|----|---|
| 1 | ENGLISH | 13 | 39 | 52 | 6 | 2 | MATHEMATICS - I | 8 | 69 | 77 | 6 |
| 3 | APPLIED PHYSICS | 15 | 36 | 51 | 4 | 4 | COMPUTERS & INFORMATION TECHNOLOGY | 10 | 38 | 48 | 6 |
| 5 | NETWORK THEORY | 11 | 44 | 55 | 6 | 6 | SEMICONDUCTOR DEVICES & CKTS. | 11 | 31 | 42 | 6 |
| 7 | C & DATA STRUCTURES | 11 | 35 | 46 | 6 | 8 | COMPUTER PROGRAMMING (LAB) | 4 | 24 | 28 | 8 |
| 9 | SEMICONDUCTOR DEVICES & CKTS. (LAB) | 6 | 19 | 25 | 4 | 10 | ENGINEERING DRAWING PRACTICE | 4 | 28 | 32 | 4 |

I SEMESTER

II YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|-------------------------------------|----|----|----|---|---|-----------------------------------|----|----|----|---|
| 1 | MATHEMATICS - II | 15 | 37 | 52 | 4 | 1 | PROBABILITY & STATISTICS | 9 | 47 | 56 | 4 |
| 2 | SWITCHING THEORY & LOGIC DESIGN | 10 | 40 | 50 | 4 | 2 | ELECTRICAL TECHNOLOGY | 10 | 37 | 47 | 4 |
| 3 | MANG. ECO. & PRIN. OF ACCOUNTANCY | 8 | 38 | 46 | 4 | 3 | COMPUTER ORGANISATION | 9 | 38 | 47 | 4 |
| 4 | DISCRETE STRUCTURES & GRAPH THEORY | 15 | 32 | 47 | 4 | 4 | OPERATING SYSTEMS | 12 | 29 | 41 | 4 |
| 5 | DATA PROCESSING & FILE ORGANISATION | 10 | 40 | 50 | 4 | 5 | OBJECT ORIENTED PROGRAMMING | 9 | 45 | 54 | 4 |
| 6 | LINEAR & DIGITAL ICS APPLICATIONS | 10 | 50 | 60 | 4 | 6 | OPERATING SYSTEMS (LAB) | 5 | 18 | 23 | 2 |
| 7 | COBOL (LAB) | 5 | 19 | 24 | 2 | 7 | OBJECT ORIENTED PROGRAMMING (LAB) | 5 | 25 | 30 | 2 |
| 8 | IC APPLICATIONS (LAB) | 6 | 20 | 26 | 2 | 8 | DESIGN & ANALYSIS OF ALGORITHMS | 9 | 31 | 40 | 4 |

I SEMESTER

III YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|--------------------------------------|----|----|----|---|---|-----------------------------------|----|----|----|---|
| 1 | INTERFACING THROUGH MICROPROCESSOR | 10 | 43 | 53 | 4 | 1 | MANAGEMENT SCIENCE | 15 | 39 | 54 | 4 |
| 2 | OPERATIONS RESEARCH | 19 | 60 | 79 | 4 | 2 | COMPUTER GRAPHICS | 15 | 38 | 53 | 4 |
| 3 | DATA COMMUNICATIONS | 7 | 38 | 45 | 4 | 3 | COMPUTER NETWORKS | 10 | 30 | 40 | 4 |
| 4 | THEORY OF COMPUTATION | 8 | 34 | 42 | 4 | 4 | ARTIFICIAL INTELLIGENCE | 12 | 28 | 40 | 4 |
| 5 | PRINCIPLES OF PROGRAMMING LANGUAGE | 6 | 38 | 44 | 4 | 5 | LANGUAGE PROCESSORS | 13 | 28 | 41 | 4 |
| 6 | SYSTEMS PROGRAMMING | 7 | 37 | 44 | 4 | 6 | DATABASE MANAGEMENT SYSTEMS | 12 | 28 | 40 | 4 |
| 7 | INTERFACING TH. MICROPROCESSOR (LAB) | 5 | 30 | 35 | 2 | 7 | LANGUAGE PROCESSORS (LAB) | 7 | 17 | 24 | 2 |
| 8 | SYSTEMS PROGRAMMING (LAB) | 2 | 22 | 24 | 2 | 8 | DATABASE MANAGEMENT SYSTEMS (LAB) | 6 | 17 | 23 | 2 |

I SEMESTER

IV YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|--------------------------------|----|----|----|---|---|----------------------------|----|-----|-----|---|
| 1 | SOFTWARE ENGINEERING | 17 | 39 | 56 | 4 | 1 | SIMULATION & MODELING | 18 | 37 | 55 | 4 |
| 2 | DISTRIBUTED SYSTEMS | 19 | 38 | 57 | 4 | 2 | DATA MINING & WARE HOUSING | 19 | 34 | 53 | 4 |
| 3 | VISUAL PROGRAMMING TECHNIQUES | 18 | 28 | 46 | 4 | 3 | PROJECT WORK # | 37 | 140 | 177 | 8 |
| 4 | JAVA PROGRAMMING | 16 | 28 | 44 | 4 | | | | | | |
| 5 | ADVANCED COMPUTER ARCHITECTURE | 18 | 38 | 56 | 4 | | | | | | |
| 6 | NEURAL NETWORKS | 19 | 39 | 58 | 4 | | | | | | |
| 7 | VISUAL PROGRAMMING (LAB) | 9 | 37 | 46 | 2 | | | | | | |
| 8 | JAVA (LAB) | 8 | 37 | 45 | 2 | | | | | | |

Number of Credits registered for: 212

(# Project Internal = 40, External = 180)

Aggregate Marks Secured for best 212 credits

2523 OUT OF 4750 (53.12 %)

Date of Declaration of Result: May 26, 2006

(See overleaf for instruments)

(*Courses registered for but not counted for calculation of aggregate)

[Signature]
CONTROLLER OF EXAMINATIONS

CC 218278
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408054154

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY



HYDERABAD, ANDHRA PRADESH, INDIA

College Code: 62, (A E C, BHONGIR)

Mr. S Chandrasekhar

S/o Mr. S Seshachalapathi Rao

having fulfilled the academic requirements and passed the examination held during *November - 2008* in * *First Class* *

has, this day been admitted by the Executive Council, to the Degree of

Master of Technology

Software Engineering

Given under the Seal of the University

H. T. No: 06621D2503

Date: 27-11-2009

K. Jagan Mohan Reddy

Controller of Examinations

Srinivasan

Director of Evaluation

E. Sree Babu

Registrar



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD - 500 072. ANDHRA PRADESH, INDIA

MEMORANDUM OF MARKS

MEMO NO : Z 042627

S.No. 4392590

EXAMINATION: M.Tech. I Semester Regular HALL TICKET NO: 06621D2503

BRANCH: Software Engineering MONTH & YEAR OF EXAM.: January, 2007

NAME: S CHANDRA SEKHAR INSTITUTION: AEC, BHONGIR

| S.No. | SUBJECT CODE | SUBJECT TITLE | Internal Marks | End Exam. Marks | Total Marks | RESULT | |
|------------------------|--------------|---------------------------------------|----------------|-----------------|-------------|-----------|--|
| 1 | A2501 | SOFTWARE REQUIREMENTS & ESTIMATION | 30 | 27 | 57 | P | |
| 2 | A2502 | UNIX NETWORK PROGRAMMING | 30 | 24 | 54 | P | |
| 3 | A2503 | SOFTWARE PROCESS & PROJECT MANAGEMENT | 24 | 26 | 50 | P | |
| 4 | A2504 | WEB TECHNOLOGIES | 25 | 27 | 52 | P | |
| 5 | A2505 | WIRELESS NETWORKS & MOBILE COMPUTING | 31 | 46 | 77 | P | |
| 6 | A2506 | OBJECT ORIENTED MODELING | 27 | 28 | 55 | P | |
| 7 | A2507 | JAVA/WEB TECHNOLOGIES (LAB) | 32 | 43 | 75 | P | |
| SUBJECTS REGISTERED: 7 | | | APPEARED: 7 | | | PASSED: 7 | |
| TOTAL | | | 199 | 221 | 420 | | |

**** Four Two Zero ****

AGGREGATE (IN WORDS)

P : PASS
 F : FAIL
 AB : ABSENT



[Handwritten Signature]

DATE: 17-03-2007

DATE: VERIFIED BY CONTROLLER OF EXAMINATIONS

| INSTRUCTIONS: | MAXIMUM MARKS | | | MINIMUM MARKS FOR PASS | |
|--------------------|---------------|-----------|---------------------|------------------------|---------------------|
| | Internal | End Exam. | Total of Int. & End | End Exam | Total of Int. & End |
| THEORY SUBJECTS | 40 | 60 | 100 | 24 | 50 |
| PRACTICAL SUBJECTS | 40 | 60 | 100 | 24 | 50 |

Note : The application for the recounting of marks with prescribed fee should be submitted within 15 days from the date of publication of results.



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD - 500 072, ANDHRA PRADESH, INDIA

MEMO NO.: B 0891846

MEMORANDUM OF MARKS

S.No: 4872638

EXAMINATION: M. Tech. II Semester Regular

HALL TICKET NO:

06621D2503

BRANCH: Software Engineering

MONTH & YEAR OF EXAM.: August, 2007

NAME S CHANDRA SEKHAR

INSTITUTION: AEC, BHONGIR

| S.No. | SUBJECT CODE | SUBJECT TITLE | Internal Marks | End Exam | Total Marks | Result | Credits |
|--|--------------|--|----------------|----------|-------------|--------|---------|
| 1 | B2501 | INFORMATION SECURITY | 34 | 35 | 69 | P | |
| 2 | B2502 | DATA WAREHOUSING & MINING | 31 | 28 | 59 | P | |
| 3 | B2503 | SOFTWARE QUALITY ASSURANCE & TESTING | 30 | 29 | 59 | P | |
| 4 | B2504 | SOFTWARE ARCHITECTURE & DESIGN PATTERN | 27 | 26 | 53 | P | |
| 5 | B2505 | HUMAN COMPUTER INTERACTION | 37 | 40 | 77 | P | |
| 6 | B2507 | MULTIMEDIA & APPLICATION DEVELOPMENT | 38 | 33 | 71 | P | |
| 7 | B2511 | INFO. SECURITY/DATA WAREHOUSING - LAB | 32 | 48 | 80 | P | |
| SUBJECTS REGISTERED: 7 APPEARED: 7 PASSED: 7 TOTAL | | | 229 | 239 | 468 | | |

AGGREGATE (IN WORDS)

**** Four Six Eight *****



B. Deay Kumar

DATE: 06-10-2007

VERIFIED BY

CONTROLLER OF EXAMINATIONS

INSTRUCTIONS

MAXIMUM MARKS

| Internal | End Exam | Total of Int. & End |
|----------|----------|---------------------|
| 40 | 60 | 100 |
| 40 | 60 | 100 |

MINIMUM FOR PASS

| End Exam | Total of Int. & End |
|----------|---------------------|
| 24 | 50 |
| 24 | 50 |

| | | | | | |
|---------------------------------|----|----|-----|----|----|
| THEORY/DRAWING, DESIGN SUBJECTS | 40 | 60 | 100 | 24 | 50 |
| PRACTICAL SUBJECTS | 40 | 60 | 100 | 24 | 50 |

P/PASS

F: FAIL

AB: ABSENT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
KUKATPALLY, HYDERABAD - 500 072

H.T.NO:06621D2503

1375097837



Sl. No. K 5 006251

MEMORANDUM OF MARKS

Name of the Examination : M.TECH. (SOFTWARE ENGINEERING)

II Year

Name of the Candidate : S CHANDRASEKHAR

Institution : AEC, BHONGIR

Month & Year of Examination : November 2008

| Sl. No. | Subjects | Max Marks | Marks/ Grade Secured | Result |
|---------|--------------|-----------|----------------------|--------|
| 1 | SEMINAR | 50 | 38 | PASS |
| 2 | PROJECT | | C | PASS |
| | Total | 50 | 38 | |

Marks Secured in words : ** THREE EIGHT **

Hyderabad

Verified By

Controller of Examinations

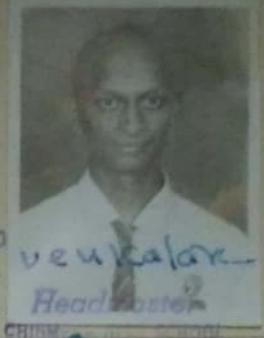
Date: 30-12-2008

LEGEND : [A-Excellent, B-Good, C-Satisfactory, D-Not Satisfactory]

BOARD OF SECONDARY EDUCATION
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322346



Venukalan
Headmaster

SECONDARY SCHOOL CERTIFICATE

PC/04/001948479

CHINMAYA HIGH SCHOOL
RECOGNISED BY GOVT. OF A.P.
MIRZALGUDA, HYD'BAD - 500 047

| | | | | | | | |
|---|--|---|--|--|--|------------------------------|--|
| CERTIFIED THAT | | S CHANDRASEKHAR | | Bearing Roll No. | | 0054608 | |
| S/O | | S SESHACHALAPATHI RAO | | | | | |
| belongs to | | CHINMAYA HIGH SCHOOL, MIRZALGUDA | | | | | |
| has appeared and PASSED at the SSC EXAMINATION held in | | | | MAR, 1998 | | with | |
| FIRST | | division and | | ENGLISH | | as the medium of instruction | |
| DATE OF BIRTH OF THE CANDIDATE | | DAY | | MONTH | | YEAR | |
| 09/11/1981 | | ZERO | | NINE | | NOV ONE NINE EIGHT ONE | |
| THE CANDIDATE SECURED THE FOLLOWING PERCENTAGE OF MARKS | | | | | | | |
| SUBJECT | | Marks secured (in Figures) | | Marks secured (in Words) | | | |
| FIRST LANGUAGE (HINDI) | | 74 | | SEVEN FOUR | | | |
| THIRD LANGUAGE - ENGLISH | | 80 | | EIGHT ZERO | | | |
| MATHEMATICS | | 83 | | EIGHT THREE | | | |
| GENERAL SCIENCE | | 89 | | EIGHT NINE | | | |
| SOCIAL STUDIES | | 94 | | NINE FOUR | | | |
| TOTAL | | 420 | | (FOUR TWO ZERO) | | | |
| SECOND LANGUAGE (TELUGU) | | 74 | | SEVEN FOUR | | | |
| GRAND TOTAL | | 494 | | (FOUR NINE FOUR) | | | |
| Marks of Identification | | 1. A mole on the right palm. 2. A mole on the left side of the neck. | | | | | |
| Head of Institution with School Stamp | | Venukalan Headmaster CHINMAYA HIGH SCHOOL RECOGNISED BY GOVT. OF A.P. MIRZALGUDA, HYD'BAD - 500 047 | | | | | |
| Date of Issue by the Board | | 26/05/1998. | | SECRETARY BOARD OF SECONDARY EDUCATION HYDERABAD | | | |
| Any corrections in the certificate will not be entertained after 3 years from the date of issue. Any unauthorised correction in the certificate will result in cancellation of certificate. The marks with the asterisk indicates the marks (old marks) secured in previous Examinations. | | | | | | | |

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY



HYDERABAD, ANDHRA PRADESH, INDIA

College Code: E1 (B I E T, IBRAHIMPATNAM)

Mr. S Chandrasekhar
S/o S Seshachalapathi Rao

having fulfilled the academic requirements and passed the examination
held during *May - 2006* in *** Second Class ***
has this day been admitted by the Executive Council to the Degree of

Bachelor of Technology
(Computer Science & Engineering)

Given under the Seal of the University

H.T.No : 01E11A0506

Date : 30 March, 2007

0650523

[Signature]
Controller of Examinations

[Signature]
Director of Evaluation

[Signature]
Registrar



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
HYDERABAD - 500 072.
ANDHRA PRADESH, INDIA

CONSOLIDATED MARKS MEMO / CREDIT SHEET

CMM No: A 093088

Bachelor of Technology in **COMPUTER SCIENCE & ENGINEERING**

Serial No.: **513340277245**
Name: **S CHANDRASEKHAR**
Hall Ticket No.: **01E11A0506**

Year of Admission **2001-2002**

Name of the College: **BIET, IBRAHIMPATNAM**
Month & Year of Final Exam: **May, 2006**
Class Awarded: ***** SECOND CLASS *****

| S.No. | COURSE TITLE | INTERNAL MARKS | EXTERNAL MARKS | TOTAL | CREDITS | S.No. | COURSE TITLE | INTERNAL MARKS | EXTERNAL MARKS | TOTAL | CREDITS |
|-------|--------------|----------------|----------------|-------|---------|-------|--------------|----------------|----------------|-------|---------|
| | THEORY Max. | 20 | 80 | 100 | | | THEORY Max. | 20 | 80 | 100 | |
| | LAB | 10 | 40 | 50 | | | LAB | 10 | 40 | 50 | |

I YEAR

| | | | | | | | | | | | |
|---|-------------------------------------|----|----|----|---|----|------------------------------------|----|----|----|---|
| 1 | ENGLISH | 13 | 39 | 52 | 6 | 2 | MATHEMATICS - I | 8 | 69 | 77 | 6 |
| 3 | APPLIED PHYSICS | 15 | 36 | 51 | 4 | 4 | COMPUTERS & INFORMATION TECHNOLOGY | 10 | 38 | 48 | 6 |
| 5 | NETWORK THEORY | 11 | 44 | 55 | 6 | 6 | SEMICONDUCTOR DEVICES & CKTS. | 11 | 31 | 42 | 6 |
| 7 | C & DATA STRUCTURES | 11 | 35 | 46 | 6 | 8 | COMPUTER PROGRAMMING (LAB) | 4 | 24 | 28 | 8 |
| 9 | SEMICONDUCTOR DEVICES & CKTS. (LAB) | 6 | 19 | 25 | 4 | 10 | ENGINEERING DRAWING PRACTICE | 4 | 28 | 32 | 4 |

I SEMESTER

II YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|-------------------------------------|----|----|----|---|---|-----------------------------------|----|----|----|---|
| 1 | MATHEMATICS - II | 15 | 37 | 52 | 4 | 1 | PROBABILITY & STATISTICS | 9 | 47 | 56 | 4 |
| 2 | SWITCHING THEORY & LOGIC DESIGN | 10 | 40 | 50 | 4 | 2 | ELECTRICAL TECHNOLOGY | 10 | 37 | 47 | 4 |
| 3 | MANG. ECO. & PRIN. OF ACCOUNTANCY | 8 | 38 | 46 | 4 | 3 | COMPUTER ORGANISATION | 9 | 38 | 47 | 4 |
| 4 | DISCRETE STRUCTURES & GRAPH THEORY | 15 | 32 | 47 | 4 | 4 | OPERATING SYSTEMS | 12 | 29 | 41 | 4 |
| 5 | DATA PROCESSING & FILE ORGANISATION | 10 | 40 | 50 | 4 | 5 | OBJECT ORIENTED PROGRAMMING | 9 | 45 | 54 | 4 |
| 6 | LINEAR & DIGITAL ICS APPLICATIONS | 10 | 50 | 60 | 4 | 6 | OPERATING SYSTEMS (LAB) | 5 | 18 | 23 | 2 |
| 7 | COBOL (LAB) | 5 | 19 | 24 | 2 | 7 | OBJECT ORIENTED PROGRAMMING (LAB) | 5 | 25 | 30 | 2 |
| 8 | IC APPLICATIONS (LAB) | 6 | 20 | 26 | 2 | 8 | DESIGN & ANALYSIS OF ALGORITHMS | 9 | 31 | 40 | 4 |

I SEMESTER

III YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|--------------------------------------|----|----|----|---|---|-----------------------------------|----|----|----|---|
| 1 | INTERFACING THROUGH MICROPROCESSOR | 10 | 43 | 53 | 4 | 1 | MANAGEMENT SCIENCE | 15 | 39 | 54 | 4 |
| 2 | OPERATIONS RESEARCH | 19 | 60 | 79 | 4 | 2 | COMPUTER GRAPHICS | 15 | 38 | 53 | 4 |
| 3 | DATA COMMUNICATIONS | 7 | 38 | 45 | 4 | 3 | COMPUTER NETWORKS | 10 | 30 | 40 | 4 |
| 4 | THEORY OF COMPUTATION | 8 | 34 | 42 | 4 | 4 | ARTIFICIAL INTELLIGENCE | 12 | 28 | 40 | 4 |
| 5 | PRINCIPLES OF PROGRAMMING LANGUAGE | 6 | 38 | 44 | 4 | 5 | LANGUAGE PROCESSORS | 13 | 28 | 41 | 4 |
| 6 | SYSTEMS PROGRAMMING | 7 | 37 | 44 | 4 | 6 | DATABASE MANAGEMENT SYSTEMS | 12 | 28 | 40 | 4 |
| 7 | INTERFACING TH. MICROPROCESSOR (LAB) | 5 | 30 | 35 | 2 | 7 | LANGUAGE PROCESSORS (LAB) | 7 | 17 | 24 | 2 |
| 8 | SYSTEMS PROGRAMMING (LAB) | 2 | 22 | 24 | 2 | 8 | DATABASE MANAGEMENT SYSTEMS (LAB) | 6 | 17 | 23 | 2 |

I SEMESTER

IV YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|--------------------------------|----|----|----|---|---|----------------------------|----|-----|-----|---|
| 1 | SOFTWARE ENGINEERING | 17 | 39 | 56 | 4 | 1 | SIMULATION & MODELING | 18 | 37 | 55 | 4 |
| 2 | DISTRIBUTED SYSTEMS | 19 | 38 | 57 | 4 | 2 | DATA MINING & WARE HOUSING | 19 | 34 | 53 | 4 |
| 3 | VISUAL PROGRAMMING TECHNIQUES | 18 | 28 | 46 | 4 | 3 | PROJECT WORK # | 37 | 140 | 177 | 8 |
| 4 | JAVA PROGRAMMING | 16 | 28 | 44 | 4 | | | | | | |
| 5 | ADVANCED COMPUTER ARCHITECTURE | 18 | 38 | 56 | 4 | | | | | | |
| 6 | NEURAL NETWORKS | 19 | 39 | 58 | 4 | | | | | | |
| 7 | VISUAL PROGRAMMING (LAB) | 9 | 37 | 46 | 2 | | | | | | |
| 8 | JAVA (LAB) | 8 | 37 | 45 | 2 | | | | | | |

Number of Credits registered for: 212

(# Project Internal = 40, External = 180)

Aggregate Marks Secured for best 212 credits

2523 OUT OF 4750 (53.12 %)

Date of Declaration of Result **May 26, 2006**

(See overleaf for instruments)

(*Courses registered for but not counted for calculation of aggregate)

[Signature]
CONTROLLER OF EXAMINATIONS

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY



HYDERABAD, ANDHRA PRADESH, INDIA

College Code: 62, (A E C, BHONGIR)

Mr. S Chandrasekhar

S/o Mr. S Seshachalapathi Rao

having fulfilled the academic requirements and passed the examination held during *November - 2008* in * *First Class* *

has, this day been admitted by the Executive Council, to the Degree of

Master of Technology

Software Engineering

Given under the Seal of the University

H. T. No: 06621D2503

Date: 27-11-2009

K. Jagan Mohan

Controller of Examinations

Srinivasan

Director of Evaluation

E. Sree Babu

Registrar



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD - 500 072. ANDHRA PRADESH, INDIA

MEMORANDUM OF MARKS

MEMO NO : Z 042627

S.No. 4392590

EXAMINATION: M.Tech. I Semester Regular HALL TICKET NO: 06621D2503

BRANCH: Software Engineering MONTH & YEAR OF EXAM.: January, 2007

NAME: S CHANDRA SEKHAR INSTITUTION: AEC, BHONGIR

| S.No. | SUBJECT CODE | SUBJECT TITLE | Internal Marks | End Exam. Marks | Total Marks | RESULT | |
|------------------------|--------------|---------------------------------------|----------------|-----------------|-------------|-----------|--|
| 1 | A2501 | SOFTWARE REQUIREMENTS & ESTIMATION | 30 | 27 | 57 | P | |
| 2 | A2502 | UNIX NETWORK PROGRAMMING | 30 | 24 | 54 | P | |
| 3 | A2503 | SOFTWARE PROCESS & PROJECT MANAGEMENT | 24 | 26 | 50 | P | |
| 4 | A2504 | WEB TECHNOLOGIES | 25 | 27 | 52 | P | |
| 5 | A2505 | WIRELESS NETWORKS & MOBILE COMPUTING | 31 | 46 | 77 | P | |
| 6 | A2506 | OBJECT ORIENTED MODELING | 27 | 28 | 55 | P | |
| 7 | A2507 | JAVA/WEB TECHNOLOGIES (LAB) | 32 | 43 | 75 | P | |
| SUBJECTS REGISTERED: 7 | | | APPEARED: 7 | | | PASSED: 7 | |
| TOTAL | | | 199 | 221 | 420 | | |

**** Four Two Zero ****

AGGREGATE (IN WORDS)

P : PASS
 F : FAIL
 AB : ABSENT



[Handwritten Signature]

DATE: 17-03-2007

VERIFIED BY _____ CONTROLLER OF EXAMINATIONS

| INSTRUCTIONS: | MAXIMUM MARKS | | | MINIMUM MARKS FOR PASS | |
|--------------------|---------------|-----------|---------------------|------------------------|---------------------|
| | Internal | End Exam. | Total of Int. & End | End Exam | Total of Int. & End |
| THEORY SUBJECTS | 40 | 60 | 100 | 24 | 50 |
| PRACTICAL SUBJECTS | 40 | 60 | 100 | 24 | 50 |

Note : The application for the recounting of marks with prescribed fee should be submitted within 15 days from the date of publication of results.



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD - 500 072, ANDHRA PRADESH, INDIA

MEMO NO.: B 0891846

MEMORANDUM OF MARKS

S.No: 4872638

EXAMINATION: M. Tech. II Semester Regular

HALL TICKET NO:

06621D2503

BRANCH: Software Engineering

MONTH & YEAR OF EXAM.: August, 2007

NAME S CHANDRA SEKHAR

INSTITUTION: AEC, BHONGIR

| S.No. | SUBJECT CODE | SUBJECT TITLE | Internal Marks | End Exam | Total Marks | Result | Credits |
|--|--------------|--|----------------|----------|-------------|--------|---------|
| 1 | B2501 | INFORMATION SECURITY | 34 | 35 | 69 | P | |
| 2 | B2502 | DATA WAREHOUSING & MINING | 31 | 28 | 59 | P | |
| 3 | B2503 | SOFTWARE QUALITY ASSURANCE & TESTING | 30 | 29 | 59 | P | |
| 4 | B2504 | SOFTWARE ARCHITECTURE & DESIGN PATTERN | 27 | 26 | 53 | P | |
| 5 | B2505 | HUMAN COMPUTER INTERACTION | 37 | 40 | 77 | P | |
| 6 | B2507 | MULTIMEDIA & APPLICATION DEVELOPMENT | 38 | 33 | 71 | P | |
| 7 | B2511 | INFO. SECURITY/DATA WAREHOUSING - LAB | 32 | 48 | 80 | P | |
| SUBJECTS REGISTERED: 7 APPEARED: 7 PASSED: 7 TOTAL | | | 229 | 239 | 468 | | |

AGGREGATE (IN WORDS)

**** Four Six Eight *****



B. Deay Kumar

DATE: 06-10-2007

VERIFIED BY

CONTROLLER OF EXAMINATIONS

INSTRUCTIONS

MAXIMUM MARKS

| Internal | End Exam | Total of Int. & End |
|----------|----------|---------------------|
| 40 | 60 | 100 |
| 40 | 60 | 100 |

MINIMUM FOR PASS

| End Exam | Total of Int. & End |
|----------|---------------------|
| 24 | 50 |
| 24 | 50 |

| | | | | | |
|---------------------------------|----|----|-----|----|----|
| THEORY/DRAWING, DESIGN SUBJECTS | 40 | 60 | 100 | 24 | 50 |
| PRACTICAL SUBJECTS | 40 | 60 | 100 | 24 | 50 |

P/PASS

F: FAIL

AB: ABSENT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
KUKATPALLY, HYDERABAD - 500 072

H.T.NO:06621D2503

1375097837



Sl. No. K 5 006251

MEMORANDUM OF MARKS

Name of the Examination : M.TECH. (SOFTWARE ENGINEERING)

II Year

Name of the Candidate : S CHANDRASEKHAR

Institution : AEC, BHONGIR

Month & Year of Examination : November 2008

| Sl. No. | Subjects | Max Marks | Marks/ Grade Secured | Result |
|---------|--------------|-----------|----------------------|--------|
| 1 | SEMINAR | 50 | 38 | PASS |
| 2 | PROJECT | | C | PASS |
| | Total | 50 | 38 | |

Marks Secured in words : ** THREE EIGHT **

Hyderabad

Verified By

Controller of Examinations

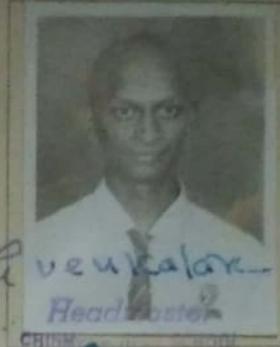
Date: 30-12-2008

LEGEND : [A-Excellent, B-Good, C-Satisfactory, D-Not Satisfactory]

BOARD OF SECONDARY EDUCATION
ANDHRA PRADESH

YZ

322346



Venukalan
Headmaster

SECONDARY SCHOOL CERTIFICATE

PC/04/001948479

CHINMAYA HIGH SCHOOL
RECOGNISED BY GOVT. OF A.P.
MIRZALGUDA, HYD'BAD - 500 047

| | | | | | | | |
|---|--|---|--|--|--|------------------------------|--|
| CERTIFIED THAT | | S CHANDRASEKHAR | | Bearing Roll No. | | 0054608 | |
| S/O S SESHACHALAPATHI RAO | | | | | | | |
| belongs to | | CHINMAYA HIGH SCHOOL, MIRZALGUDA | | | | | |
| has appeared and PASSED at the SSC EXAMINATION held in | | | | MAR, 1998 | | with | |
| FIRST | | division and | | ENGLISH | | as the medium of instruction | |
| DATE OF BIRTH OF THE CANDIDATE | | DAY | | MONTH | | YEAR | |
| 09/11/1981 | | ZERO | | NINE | | NOV ONE NINE EIGHT ONE | |
| THE CANDIDATE SECURED THE FOLLOWING PERCENTAGE OF MARKS | | | | | | | |
| SUBJECT | | Marks secured (in Figures) | | Marks secured (in Words) | | | |
| FIRST LANGUAGE (HINDI) | | 74 | | SEVEN FOUR | | | |
| THIRD LANGUAGE - ENGLISH | | 80 | | EIGHT ZERO | | | |
| MATHEMATICS | | 83 | | EIGHT THREE | | | |
| GENERAL SCIENCE | | 89 | | EIGHT NINE | | | |
| SOCIAL STUDIES | | 94 | | NINE FOUR | | | |
| TOTAL | | 420 | | (FOUR TWO ZERO) | | | |
| SECOND LANGUAGE (TELUGU) | | 74 | | SEVEN FOUR | | | |
| GRAND TOTAL | | 494 | | (FOUR NINE FOUR) | | | |
| Marks of Identification | | 1. A mole on the right palm. 2. A mole on the left side of the neck. | | | | | |
| Head of Institution with School Stamp | | Venukalan Headmaster CHINMAYA HIGH SCHOOL RECOGNISED BY GOVT. OF A.P. MIRZALGUDA, HYD'BAD - 500 047 | | | | | |
| Date of Issue by the Board | | 26/05/1998. | | SECRETARY BOARD OF SECONDARY EDUCATION HYDERABAD | | | |
| Any corrections in the certificate will not be entertained after 3 years from the date of issue. Any unauthorised correction in the certificate will result in cancellation of certificate. The marks with the asterisk indicates the marks (old marks) secured in previous Examinations. | | | | | | | |

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY



HYDERABAD, ANDHRA PRADESH, INDIA

College Code: E1 (B I E T, IBRAHIMPATNAM)

Mr. S Chandrasekhar
S/o S Seshachalapathi Rao

having fulfilled the academic requirements and passed the examination held during *May - 2006* in *** Second Class *** has this day been admitted by the Executive Council to the Degree of

Bachelor of Technology
(Computer Science & Engineering)

Given under the Seal of the University

H.T.No : **01E11A0506**

Date : 30 March, 2007

0650523

[Signature]
Controller of Examination

[Signature]
Director of Evaluation

[Signature]
Registrar



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
 HYDERABAD - 500 072.
 ANDHRA PRADESH, INDIA

CONSOLIDATED MARKS MEMO / CREDIT SHEET



CMM No: A 093088

Bachelor of Technology in **COMPUTER SCIENCE & ENGINEERING**

Serial No.: **513340277245**
 Name: **S CHANDRASEKHAR**
 Hall Ticket No.: **01E11A0506**

Year of Admission **2001-2002**

Name of the College: **B I E T, IBRAHIMPATNAM**
 Month & Year of Final Exam: **May, 2006**
 Class Awarded: ***** SECOND CLASS *****

| S.No. | COURSE TITLE | INTERNAL MARKS | EXTERNAL MARKS | TOTAL | CREDITS | S.No. | COURSE TITLE | INTERNAL MARKS | EXTERNAL MARKS | TOTAL | CREDITS |
|-------|--------------|----------------|----------------|-------|---------|-------|--------------|----------------|----------------|-------|---------|
| | THEORY Max. | 20 | 80 | 100 | | | THEORY Max. | 20 | 80 | 100 | |
| | LAB | 10 | 40 | 50 | | | LAB | 10 | 40 | 50 | |

I YEAR

| | | | | | | | | | | | |
|---|-------------------------------------|----|----|----|---|----|------------------------------------|----|----|----|---|
| 1 | ENGLISH | 13 | 39 | 52 | 6 | 2 | MATHEMATICS - I | 8 | 69 | 77 | 6 |
| 3 | APPLIED PHYSICS | 15 | 36 | 51 | 4 | 4 | COMPUTERS & INFORMATION TECHNOLOGY | 10 | 38 | 48 | 6 |
| 5 | NETWORK THEORY | 11 | 44 | 55 | 6 | 6 | SEMICONDUCTOR DEVICES & CKTS. | 11 | 31 | 42 | 6 |
| 7 | C & DATA STRUCTURES | 11 | 35 | 46 | 6 | 8 | COMPUTER PROGRAMMING (LAB) | 4 | 24 | 28 | 8 |
| 9 | SEMICONDUCTOR DEVICES & CKTS. (LAB) | 6 | 19 | 25 | 4 | 10 | ENGINEERING DRAWING PRACTICE | 4 | 28 | 32 | 4 |

I SEMESTER

II YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|-------------------------------------|----|----|----|---|---|-----------------------------------|----|----|----|---|
| 1 | MATHEMATICS - II | 15 | 37 | 52 | 4 | 1 | PROBABILITY & STATISTICS | 9 | 47 | 56 | 4 |
| 2 | SWITCHING THEORY & LOGIC DESIGN | 10 | 40 | 50 | 4 | 2 | ELECTRICAL TECHNOLOGY | 10 | 37 | 47 | 4 |
| 3 | MANG. ECO. & PRIN. OF ACCOUNTANCY | 8 | 38 | 46 | 4 | 3 | COMPUTER ORGANISATION | 9 | 38 | 47 | 4 |
| 4 | DISCRETE STRUCTURES & GRAPH THEORY | 15 | 32 | 47 | 4 | 4 | OPERATING SYSTEMS | 12 | 29 | 41 | 4 |
| 5 | DATA PROCESSING & FILE ORGANISATION | 10 | 40 | 50 | 4 | 5 | OBJECT ORIENTED PROGRAMMING | 9 | 45 | 54 | 4 |
| 6 | LINEAR & DIGITAL ICS APPLICATIONS | 10 | 50 | 60 | 4 | 6 | OPERATING SYSTEMS (LAB) | 5 | 18 | 23 | 2 |
| 7 | COBOL (LAB) | 5 | 19 | 24 | 2 | 7 | OBJECT ORIENTED PROGRAMMING (LAB) | 5 | 25 | 30 | 2 |
| 8 | IC APPLICATIONS (LAB) | 6 | 20 | 26 | 2 | 8 | DESIGN & ANALYSIS OF ALGORITHMS | 9 | 31 | 40 | 4 |

I SEMESTER

III YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|--------------------------------------|----|----|----|---|---|-----------------------------------|----|----|----|---|
| 1 | INTERFACING THROUGH MICROPROCESSOR | 10 | 43 | 53 | 4 | 1 | MANAGEMENT SCIENCE | 15 | 39 | 54 | 4 |
| 2 | OPERATIONS RESEARCH | 19 | 60 | 79 | 4 | 2 | COMPUTER GRAPHICS | 15 | 38 | 53 | 4 |
| 3 | DATA COMMUNICATIONS | 7 | 38 | 45 | 4 | 3 | COMPUTER NETWORKS | 10 | 30 | 40 | 4 |
| 4 | THEORY OF COMPUTATION | 8 | 34 | 42 | 4 | 4 | ARTIFICIAL INTELLIGENCE | 12 | 28 | 40 | 4 |
| 5 | PRINCIPLES OF PROGRAMMING LANGUAGE | 6 | 38 | 44 | 4 | 5 | LANGUAGE PROCESSORS | 13 | 28 | 41 | 4 |
| 6 | SYSTEMS PROGRAMMING | 7 | 37 | 44 | 4 | 6 | DATABASE MANAGEMENT SYSTEMS | 12 | 28 | 40 | 4 |
| 7 | INTERFACING TH. MICROPROCESSOR (LAB) | 5 | 30 | 35 | 2 | 7 | LANGUAGE PROCESSORS (LAB) | 7 | 17 | 24 | 2 |
| 8 | SYSTEMS PROGRAMMING (LAB) | 2 | 22 | 24 | 2 | 8 | DATABASE MANAGEMENT SYSTEMS (LAB) | 6 | 17 | 23 | 2 |

I SEMESTER

IV YEAR

II SEMESTER

| | | | | | | | | | | | |
|---|--------------------------------|----|----|----|---|---|----------------------------|----|-----|-----|---|
| 1 | SOFTWARE ENGINEERING | 17 | 39 | 56 | 4 | 1 | SIMULATION & MODELING | 18 | 37 | 55 | 4 |
| 2 | DISTRIBUTED SYSTEMS | 19 | 38 | 57 | 4 | 2 | DATA MINING & WARE HOUSING | 19 | 34 | 53 | 4 |
| 3 | VISUAL PROGRAMMING TECHNIQUES | 18 | 28 | 46 | 4 | 3 | PROJECT WORK # | 37 | 140 | 177 | 6 |
| 4 | JAVA PROGRAMMING | 16 | 28 | 44 | 4 | | | | | | |
| 5 | ADVANCED COMPUTER ARCHITECTURE | 18 | 38 | 56 | 4 | | | | | | |
| 6 | NEURAL NETWORKS | 19 | 39 | 58 | 4 | | | | | | |
| 7 | VISUAL PROGRAMMING (LAB) | 9 | 37 | 46 | 2 | | | | | | |
| 8 | JAVA (LAB) | 8 | 37 | 45 | 2 | | | | | | |

Number of Credits registered for: 212

(# Project Internal = 40, External = 160)

Aggregate Marks Secured for best 212 credits: 2523 OUT OF 4750 (53.12 %)

Date of Declaration of Result: May 26, 2006

(See overleaf for instruments)

(*Courses registered for but not counted for calculation of aggregate)

[Signature]
 CONTROLLER OF EXAMINATIONS

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD, ANDHRA PRADESH, INDIA

College Code: 62, (A E C, BHONGIR)

Mr. S Chandrasekhar

S/o Mr. S Seshachalapathi Rao

having fulfilled the academic requirements and passed the examination held during *November - 2008* in ** First Class **

has, this day been admitted by the Executive Council to the Degree of

Master of Technology
Software Engineering

Given under the Seal of the University

H. T. No: 06621D2503

Date: 27-11-2009

K. Hanumanth

Controller of Examinations

Chinnamurthy

Director of Evaluation

E. Sree Babu

Registrar



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD - 500 072. ANDHRA PRADESH, INDIA

MEMORANDUM OF MARKS

MEMONO : Z 042627

S No. 4392590

EXAMINATION: M.Tech. I Semester Regular HALL TICKET NO: 06621D2503

BRANCH: Software Engineering MONTH & YEAR OF EXAM: January, 2007

NAME: S CHANDRA SEKHAR INSTITUTION: AEC, BHONGIR

| S.No. | SUBJECT CODE | SUBJECT TITLE | Internal Marks | End Exam. Marks | Total Marks | RESULT | |
|------------------------|--------------|---------------------------------------|----------------|-----------------|-------------|-----------|--|
| 1 | A2501 | SOFTWARE REQUIREMENTS & ESTIMATION | 30 | 27 | 57 | P | |
| 2 | A2502 | UNIX NETWORK PROGRAMMING | 30 | 24 | 54 | P | |
| 3 | A2503 | SOFTWARE PROCESS & PROJECT MANAGEMENT | 24 | 26 | 50 | P | |
| 4 | A2504 | WEB TECHNOLOGIES | 25 | 27 | 52 | P | |
| 5 | A2505 | WIRELESS NETWORKS & MOBILE COMPUTING | 31 | 46 | 77 | P | |
| 6 | A2506 | OBJECT ORIENTED MODELING | 27 | 28 | 55 | P | |
| 7 | A2507 | JAVA/WEB TECHNOLOGIES (LAB) | 32 | 43 | 75 | P | |
| SUBJECTS REGISTERED: 7 | | | APPEARED: 7 | | | PASSED: 7 | |
| TOTAL | | | 199 | 221 | 420 | | |

**** Four Two Zero ****

AGGREGATE (IN WORDS)

P : PASS
 F : FAIL
 AB : ABSENT



[Handwritten Signature]

17-03-2007

DATE: 17-03-2007 VERIFIED BY: CONTROLLER OF EXAMINATIONS

| INSTRUCTIONS: | MAXIMUM MARKS | | | MINIMUM MARKS FOR PASS | |
|--------------------|---------------|-----------|---------------------|------------------------|---------------------|
| | Internal | End Exam. | Total of Int. & End | End Exam | Total of Int. & End |
| THEORY SUBJECTS | 40 | 60 | 100 | 24 | 50 |
| PRACTICAL SUBJECTS | 40 | 60 | 100 | 24 | 50 |

Note : The application for the recounting of marks with prescribed fee should be submitted within 15 days from the date of publication of results.



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

HYDERABAD - 500 072, ANDHRA PRADESH, INDIA

MEMO NO.: B 0891846

MEMORANDUM OF MARKS

S.No 4872636

EXAMINATION: M. Tech. II Semester Regular

HALL TICKET NO.

06621D2503

BRANCH: Software Engineering

MONTH & YEAR OF EXAM: August, 2007

NAME S CHANDRA SEKHAR

INSTITUTION: AEC, BHONGIR

| S.No. | SUBJECT CODE | SUBJECT TITLE | Internal Marks | End Exam | Total Marks | Result | Credits |
|--|--------------|--|----------------|----------|-------------|--------|---------|
| 1 | B2501 | INFORMATION SECURITY | 34 | 35 | 69 | P | |
| 2 | B2502 | DATA WAREHOUSING & MINING | 31 | 28 | 59 | P | |
| 3 | B2503 | SOFTWARE QUALITY ASSURANCE & TESTING | 30 | 29 | 59 | P | |
| 4 | B2504 | SOFTWARE ARCHITECTURE & DESIGN PATTERN | 27 | 26 | 53 | P | |
| 5 | B2505 | HUMAN COMPUTER INTERACTION | 37 | 40 | 77 | P | |
| 6 | B2509 | MULTIMEDIA & APPLICATION DEVELOPMENT | 38 | 33 | 71 | P | |
| 7 | B2511 | INFO. SECURITY/DATA WAREHOUSING - LAB | 32 | 48 | 80 | P | |
| SUBJECTS REGISTERED: 7 APPEARED: 7 PASSED: 7 | | | TOTAL | 229 | 239 | 468 | |

AGGREGATE (IN WORDS)

**** Four Six Eight *****



B. Deay Kumar

DATE: 06-10-2007

VERIFIED BY

CONTROLLER OF EXAMINATIONS

INSTRUCTIONS:

MAXIMUM MARKS

MINIMUM FOR PASS

Internal End Exam Total of Int. & End

End Exam Total of Int. & End

THEORY/DRAWING/DESIGN SUBJECTS

40 60 100

24 50

PRACTICAL SUBJECTS

40 60 100

24 50

P-PASS

F-FAIL

AB-ABSENT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
KUKATPALLY, HYDERABAD - 500 072

H.T.NO:06621D2503



SI.No. K 5 006251

1375097837

MEMORANDUM OF MARKS

Name of the Examination : M.TECH.(SOFTWARE ENGINEERING)

II Year

Name of the Candidate : S CHANDRASEKHAR

Institution : AEC, BHONGIR

Month & Year of Examination : November 2008

| Sl. No. | Subjects | Max Marks | Marks/Grade Secured | Result |
|---------|--------------|-----------|---------------------|--------|
| 1 | SEMINAR | 50 | 38 | PASS |
| 2 | PROJECT | | C | PASS |
| | Total | 50 | 38 | |

Marks Secured in words : ** THREE EIGHT **

Hyderabad

Verified By

Controller of Examinations

Date: 30-12-2008

LEGEND : [A-Excellent, B-Good, C-Satisfactory, D-Not Satisfactory]

APPOINTMENT ORDER

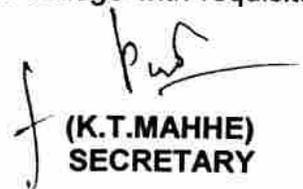
Sub:- Establishment – SNIST – Appointment as Assistant Professor of CSE – Issue of Orders – Reg.

Ref:- Your application for the above post.

In pursuance of the recommendations of Selection Committee constituted by SNIST, you are hereby appointed as Assistant Professor in Computer Science and Engineering Dept. of our institution, subject to the following conditions:

1. You will be paid a basic salary of Rs.8,000/- P.M. in the pay scale of Rs.8000-275-13500. D.A. merged scales are given in this institution.
2. You will be paid DA, HRA and CCA as per college rules.
3. You will be on probation for two years.
4. A faculty member leaving the college service during a semester leads to dislocation in class work and disruption in service to the students. It is, therefore, not desirable for a faculty member to leave the college service during an ongoing semester. If any faculty member wishes to leave the college service, he/she may do so during summer/winter vacations with one month notice period. However, if a faculty member wishes to leave during an ongoing semester, he/she may resign from the post with three months notice or on payment of three months gross salary in lieu thereof.
5. Your service conditions will be governed by the Rules and Regulations of the Institute from time to time.
6. Your appointment can be terminated with three months' notice at any time without assigning any reason.
7. You have to submit attested photocopies of your original certificates of qualifications and experience for record in our office.
8. You will have to deposit your original certificates of all your qualifications with the institute since it is experienced by the institute that some teachers have left the institution without giving any notice and without clearing the dues in library or elsewhere. This irregularity disrupts the academic and administrative functioning of the institution. In case you are not agreeable to this, you are requested to deposit one-month salary with the institute, which is recoverable from your salary in 4 monthly installments from the date of your joining the institute. Entire deposit shall be paid back to you if you leave the college with requisite notice and after clearing all the dues payable.

This order takes effect from the date of your joining the institute.


(K.T.MAHHE)
SECRETARY

To
Mr.S.Chandra Sekhar
H.No.1-1-139, Bhavani Nagar,
Malkajgiri, Hyderabad – 47.

Cc:

1. Principal
2. HOD, CSE Department
3. Accounts Officer
4. Personal File
5. Library
6. Stock File

*Appointment order
received
T. N. Naidu*

आयकर विभाग

INCOME TAX DEPARTMENT



भारत सरकार

GOVT. OF INDIA

S CHANDRA SEK HAR

SESHA CHALAPATHI RAO SINGAM

09/11/1981

1544

17

80988

Permanent Account Number

CPQPS8283G

Signature





భారత ఎన్నికల సంఘము
గుర్తింపుకార్డు

ELECTION COMMISSION OF INDIA
IDENTITY CARD

GBZ8810145



ఓటరు పేరు : చంద్రశేఖర్ యస్

Elector's Name : Chandrasehar S

తండ్రి పేరు : చలపతి రావు యస్

Father's Name : Chalapathi R S

లింగము / Sex : పు / M

పుట్టిన తేదీ / Date of Birth XX/XX/1982