MADHURESH KUMAR | 14CS30016

COMPUTER SCIENCE & ENGG. (M.Tech Dual 5Y)

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2019	M.TECH Dual Degree 5Y	IIT Kharagpur	7.37 / 10
2014	Senior Secondary School Exam	CBSE	91.2%
2012	Secondary School Exam	CBSE	10 / 10

PROJECTS

Distributed Airline ticket Booking System (Guide : Prof. Aurobindo Gupta Jan' 18 - April' 18)
Designed and implemented an integrated booking system enabling booking of airlines and hotels from geographically distributed databases in an atomic fashion in one go. The design supported efficient booking of multiple compliant tickets by achieving consensus among the involved sources using atomic 3-phase commit protocol.

Fast Extraction of Matched Keywords in spoken Documents (BTP Thesis)
(Guide : Prof K.S. Rao August' 17 - April' 18)
Detection of frequently occuring keywords using a pattern matching technique. Parallel Implementation of pattern matching on the posterior features of the speech along with parallelization of image processing techniques to achive higher speedup using two different GPU servers.

Pagerank estimation of wiki Datasets using Distributed systems(Guide. Prof. Pabitra Mitra)
Estimation of pagerank value of nodes and identifying structurally important nodes and predicting links in a large scale graph(by distributing nodes over machines) through map-reduce paradigm.

Pintos Operating System (Guide : Prof. Arobinda Gupta , Jan'17 - Mar'17)
Added Multiple Feedback Priority Queue scheduling. Improved memory allocation efficiency by implementing Buddy Memory Allocation Algorithm. Implemented support for signals and corresponding event handlers.

Transport Comapny Computerization Software (Guide: Prof. Partha Pratim Das , March'16-April'16)
A software for the transport company owner to see the status of their trucks and allot all the consignments to them in multiple cities of the country and provide overall statistics of business .

Online Restaurant Aggregator and Food Order System (Guide: Prof. Pabitra Mitra , Jan'17 - Feb'17)
Web based application for online browsing and search of menu aggregated from multiple restaurants. Customers can order food delivery online. Orders are to be forwarded to respective restaurants, who will deliver the food and bill the customers

Computer Architecture (Guide: Prof. Dipankar Sarkar , Jul'16 - Nov'16)
Implemented a complete single-cycle CPU using verilog from scratch to execute basic ALU and memory instructions. CPU could execute small codes written in machine level code.

INTERNSHIPS

VISA : INSITE CALENDAR 2.0 (May' 18 - July' 18)
Developed the insite calendar in AEM(enterprise web CMS) Touch UI for the employees showing all the location specific upcoming events of visa. Supported authoring environment by developing a new component which will be used to add a new event in calendar by authors and publishing environment by extracting the data stored in AEM crx repository as json and rendered it for display.

COURSEWORK INFORMATION

Parallel and Distributed Algorithms, Distributed Systems, Approximate and Online Algorithms, Probability and Statistics, Image Processing, Artificial Intelligence, Foundations of Cryptography , Database Management Systems , Computer Networks , Management of Growth Ventures , Operating Systems

AWARDS AND ACHIEVEMENTS

JEE ADVANCED 2014 : Secured All India Rank 1782 (Top 1%) in the JEE Advanced 2014.

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KICKSTART : Secured 201 Rank in online coding round of **GOOGLE** KickStart .

POSITIONS OF RESPONSIBILITY

KSHITIJ 2015
Campus Affiliate at KSHITIJ in Corporate Management and Branding Division.

!self declaration by the student