HEERAMANI PRASAD | 15CS30015

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

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2020	M.TECH Dual Degree 5Y	IIT Kharagpur	6.51 / 10
2015	Senior Secondary Examination	Bihar School Examination Board	75.20%
2012	Secondary School Examination	Central Board of Secondary Examinations (CBSE)	10 / 10

INTERNSHIPS

Barclays Technology Centre India Private Limited | **Intern Analyst** | May'19 - Jul'19
Developed an e-commerce website featuring user profile, shopping cart, quick view, and checkout page from scratch, using React (frontend), Express and node.js (backend) and nedb (NoSQL db).
Redeveloped the same website using next.js for server side rendering which made it lightning fast. Refractored the css from bootstrap to styled-components.
Used guess.js to predict the pages most likely to be visited; fastify and HTTP/2 server push to prefetch these pages thus enabling machine learning driven user-experiences on the web.
Converted existing web app into a progressive web app with Google Workbox.
Hosted the website using Nginx and generated free local TLS/SSL certificates.

Global Belly | **Web Development &Search Engine Optimisation (SEO)** | May'18 - Jul'18
Feature expansion like product and blog section in client shopify website.
Worked with google webmaster &analytics tool to improve the client **site ranking** to number 1 on google search.
Carried out **competitor keyword research** to increase the click rate to the client website.Worked on improving website user experience which resulted in **reduction of loading time** of the website from 8 seconds to under 3 seconds.Also did On Page and Off page optimisations.

PROJECTS

Online Health Monitor System (OHMS) | Software Engineering | Dr. Debasis Samanta | Aug'16 - Nov'16
Developed Online patient monitoring system where patients can be monitored outside the conventional clinical system.The project utilized Java Swing library along with the file handling concepts.

Reliable UDP Server &Peer-to-Peer Chat Application | Computer Network |Prof. Sandip Chakraborty | Aug'18 - Nov'18
Designed a command line interface peer to peer chat application, where user can chat with each other using terminal. It is developed in C++ using TCP socket programming without any intermediate server.
Implemented a reliable UDP server(for faster, in-order &reliable data transfer), by applying Slow-Start Congestion Control Algo over Sliding Window ARQ Protocol over UDP.

Automated Segmentation of Question-Solution Documents from NPTEL-NOC | B.Tech Project | Prof. Partha Pratim Das | Jan'18 - Apr'19
Build a command line tool for automatic segmentation of question - solution document from NPTEL-NOC. Used python, opencv and its library for preprocessing images. Also used, tesseract (an opensoursce OCR offered by google), to get the segmented parts in textual form to determine accuracy.

Linux command shell | Operating systems | Prof. Indranil Sen Gupta | Jan'18 - Apr'18
Implemented common task scheduling algorithms like FCFS, SJF, Round Robin.
Implemented several functionalities of a unix shell which supports all basic and advance commands including internal commands, redirection and pipe commands. It has been implemented using inbuilt system calls like dup and execvp in C++.

Online Restaurant Aggregator and Food Order System | Database Management System | Prof. Soumya K. Ghosh | Jan'18 - Apr'18
Developed web based application for online browsing and search of menu aggregated from multiple commercial restaurants. Customers can order food delivery online. Orders are to be forwarded to respective restaurants, who will deliver the food and bill the customers. Backend was handled using Django .

MiniMatlab Compiler | Compilers | Prof. Pralay Mitra | Aug'17 - Nov'17
Implemented a compiler lexer, parser, machine - independentt code generator and target code generator for MiniMatlab (a subset of C) in C / C++ using flex and bison libraries.

LaTeX Generation from Printed Equations | Image Processing | Prof. Partha Pratim Das | Aug'18 - Nov'18
Build a tool to automatically generate LaTeX code for the mathematical expression from printed photographed equations.

SKILLS AND EXPERTISE

•Programming languages: •OS: Windows, Ubuntu/ Unix
Profient: C, C++, Python, HTML, MySQL Familiar: Java, Javascript ES6, React.js, Next.js, Guess.js, Node.js, CSS, JSON
•Tools: Mxnet, Octave, Google workbox, Babel, Webpack, OpenCV, AWS, Android Studio, Netbeans IDE, Anaconda, Git, Postman, VS Code
Relevant Courses Taken: Programming &Data Structure | Algorithm I &II | Computer Networks | Software Engineering | Database Management System | Compilers | Machine Learning | Image Processing | Deep learning | Operating Systems | Probability and Statistics

COMPETITION/CONFERENCE

Developed a part of a **mobile game** for Windows phone in **Unity** - 3.0 # in 24 hours. **Infinite runner shooting game** with tapping feature and increasing speed in Code.fun.do Microsoft Overnight Hackathon

POSITIONS OF RESPONSIBILITY

!self declaration by the student

Navprayas is NGO run by the students working on upliftment of society by encouraging students through various activities.
Event coordinator (May'16 - Jul'16): Worked on women empowerment and career counseling for students. Organized Chess, Sketching competition, Puzzle Race(with 1000+ participation) where winners got a prize by the District Magistrate.