

Indian Institute of Technology, Madras

NAME: RAVISH KUMAR

ROLL NO: CS23M055

EDUCATION

PROGRAM	INSTITUTION	%/CGPA	Passing Year
M.Tech, Computer Science Engineering	Indian Institute of Technology, Madras	8.08/10	2025
Bachelors, Computer Science Engineering	Indian Institute of Information Technology Sricity, Chittoor	7.71/10	2021
XII	Radiant International School, Patna	82.2%	2017
X	Radiant International School, Patna	10/10	2015

SCHOLASTIC ACHIEVEMENTS

- AIR-1517 GATE CSE 2023

RELEVANT COURSEWORK AND SKILLS

- Data Structures and Algorithm
- DBMS
- Enterprise Application Development
- GPU
- Deep Learning
- PRML
- Technologies:**C++, Python, CUDA, JavaScript, MongoDB, AWS RDS, Docker, HTML, CSS, Nginx, Travis Ci
- Frameworks & Libraries:** Numpy, Pandas, PyTorch, ReactJS, React Native, ExpressJS, NodeJS, Flask
- Practices & Project Management:**Object Oriented Programming, Github

PROFESSIONAL EXPERIENCE

Software Engineer I - American Express June 2025 - Present

- Learning java and spring boot for backend service development

Senior Quality Engineer - L&T Infotech July 2021 - July 2022

- Worked in performance testing domain
- Hands on experience on LoadRunner and Jmeter

INTERNSHIPS

Fidelity Investments - Data Science Intern May 2024 - July 2024

- Worked on various model calibration methods like spline calibration, isotonic regression and platts calibration

NCIIPC - National Critical Information Infrastructure Protection Centre May 2020 - July 2020

- Worked on ELK stack
- Hands on experience of Security Onion

PROJECTS

Game Simulation using CUDA Apr 2024 - Apr 2024

- Multiple tanks on an MxN grid with health points
- Tanks attack enemy tanks algorithmically based on rounds
- A tank loses 1 health point per hit; the attacking tank's score increases by 1
- There is a possibility of another tanks in between a tank and its enemy for the current round
- Tanks with 0 or fewer health points can't participate in further rounds.
- Battle continues until only one tank remains.
- Scores are calculated at the end of each round.
- GPU parallelization with a TxT grid is used for efficient simulation, where T is the number of tanks.

Feed Forward Neural Network Feb 2024 - Mar 2024

- Implemented Feed Forward Neural network from scratch
- Implemented backpropagation algorithm supporting multiple optimization functions such as momentum based gradient descent, nestrov accelerated gradient descent etc
- The network is trained and tested on Fashion MNIST dataset

Legal Assistant Feb 2020 - Dec 2020

- A legal document retrieval system
- Made an intuitive UI using ReactJS and REST API using Flask
- Made the production grade software using Docker-compose, Nginx, uWSGI

Cloud Computing Project

Feb 2020 - Apr 2020

- Made a static event planner website using ReactJS, NodeJS
- Containerized the complete project using docker and built docker images
- Routed the request through nginx server
- Used AWS Beanstalk to host the website
- Used AWS RDS as the database
- Got hands on various cloud services such as AWS VPC, AWS S3

News Room

Sept 2019 - Dec 2019

- This is a news website
- Any user can post their content or news
- Worked on complete backend development
- Made REST API using NodeJS

Digital College

Sept 2018 - Dec 2018

- This is a web app like google classroom
- Addition to it any college can create a club
- Faculty can conduct various online quizzes
- Worked on user authentication and validation
- Worked on the frontend using HTML, Materialize CSS, Bootstrap, Django REST API

OTHER HIGHLIGHTS

- Language Proficiency: English, Hindi
- Completed the course of CEH v10 by EC-Council in 2020