

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	8.12/10	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
- GPU
- DBMS
- Deep Learning
- Enterprise Application Development
- 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

- 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

- MTP: Event-Centric Hierarchical Representation for Dense Video Captioning
- Aug 2024 - Present
- A temporal-semantic relation module is used to model the event-level interaction
 - A topic predictor is proposed to capture the scene-level context
- 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