Rohit Midha

https://rohitmidha23.github.io/

Email : rohit.midha23@gmail.com

Mobile : +91 7358777008

Github: RohitMidha23

EDUCATION

- **SSN College of Engineering, Anna University**   Tamil Nadu, India
  Bachelor of Engineering in Computer Science and Engineering; GPA: 9.2/10.0   *Aug. 2017 – July 2021*
  University Rank: #10, College Rank: #3

- **Maharish Vidya Mandir Senior Secondary School**   Chennai, India
  High School Diploma; AISSCE : 96.4% (482/500)   *June. 2015 – July. 2017*

EXPERIENCE

- **Goldman Sachs**

  Engineering Analyst   *August 2021 – Present*

  - **Risk Analysis and Review Platform (RARE)**:
    * By automating workflows, RARE lowers costs and improves quality and UX of the review process, thus bringing transparency and effectiveness to a critical risk process.
    * Setup the SLIs and SLOs for our teams offerings using Prometheus for Monitoring our Kubernetes deployments.
    * Setup Grafana Dashboards to visualise some of our SLOs as well as other metrics useful to the development teams.
    * Developed APIs (Jackson, Java) for CRUD operations as well as for certain UI use-cases.

  Engineering Intern   *Jan 2021– July 2021*

  - **Risk Metric Model**: Worked on developing the data model as well the back-end (Java, Dropwizard) that would be used as a template for reporting Risk related data by our financial counterparts in the firm.
  - **Risk Review and Reporting**:
    * Part of the initial team that worked on setting up the data model and backend for the review process at the firm.
    * Developed APIs to indicate statistics on usage of the teams offerings, as well as information that could be useful for reviewing.

  Summer Analyst   *May 2020 – June 2020*

  - **Risk Metrics Inventory UI**: Built a UI that acts as a central registry and lets users perform CRUD operations on metrics metadata, keeping inter-dependencies consistent. UI populated with values from configuration file and components kept agnostic. Made with React and Redux.

- **AIcrowd**

  Research Intern   *March 2020 – September 2020*

  - **AIcrowd Blitz**: Curated datasets and created baselines for the Mask Recognition Challenge, Food Classification Challenge and Scrambled Text Challenge.
  - **Food Recognition Challenge**: Challenge Organizer for Round 3 of the challenge. Created baselines using mmdetection for Round 2.

- **Indian Institute of Technology, Madras**   Chennai, India

  Research Intern   *November 2019 – May 2020*

  - **Mentors**: Professor Gitakrishnan Ramadurai, Professor Balaraman Ravindran
  - **License Plate Recognition**: Working on a system to recognise license plates from videos obtained from CCTV cameras.
  - **Vehicle Counting**: Working on a real time system that works with large scale data obtained from traffic cameras across the city for vehicle counting to model dynamic traffic flow.

- **Sigmoid**   Bangalore, India

  Data Scientist Intern   *May 2019 – July 2019*

- ○ **Named Entity Recognition**: Worked on using Conditional Random Fields, Recurrent Neural Networks and Long Short Term Memories for Named Entity Recognition of Medical Drugs.
- ○ **Quantum Machine Learning**: Wrote machine learning algorithms optimized to work on a quantum computer such as quantum linear regression and built a quantum Neural Network for Credit Card Fraud Detection.

- **CodeFemme**   Chennai, India
  Founder, CTO   *June 2018 – Present*
    - ○ **Te(a)chTheTeach**: Te(a)chTheTeach is a workshop series aimed at teaching PGT's about Python and it's various Libraries. Taught 100+ CBSE teachers so far.
    - ○ **Numpy, Pandas and Neural Nets**: Guest Lecture on the topic "Numpy, Pandas and Neural Nets" at Kendra Vidyalya, Indian Institute of Technology, Madras. 50+ teachers from across the country in attendance.

Research: Posters, Publications and Talks

- **A Low Cost Solution to the Open Images Instance Segmentation Challenge**: Poster accepted at International Conference on Computer Vision (ICCV), 2019
- **Transfer Learning for International Crisis Response**: Talk and Presentation at the Challenge Track of Applied Machine Learning Days (AMLD), 2020

Projects

- **pharmassist**: A novel label and Android App that lets visually impaired people gain health literacy. Reads out easy instructions for pills when prescription bottle is placed on phone screen. Connected with Alexa for easy access.
- **jargone**: A web app that summarizes Terms and Conditions to keep you informed about the data companies collect from you.
- **Calmity**: An app that helps victims of a disaster find food, transport and shelter in nearby places and allows them to make SOS calls. Further, allows able users to finding NGOs that they can volunteer at and post about any amenities that they have to offer.
- **trashify**: Android Application that uses Deep Learning and TensorFlowLite to classify your trash into 3 categories. Prototype of model using Raspberry Pi in implementation phase.
- **Facial Recognition Attendance Manager**: Creating a prototype of a model attendance manager using Facial Recognition integrated with Raspberry Pi, Cameras and Firebase requests made by the student.
  Fully funded by SSN College of Engineering.
- **Other**: The SSNMUN Website, binarify (convert images to binary art.)

Achievements

- **Runner Up, Innovation, Goldman Sachs Awards**: 2021
- **Rank 2, Hockey Team Classification Challenge, AIcrowd**: October 2020
- **Rank 1, Round 2 Food Recognition Challenge, Seerave Foundation**: May 2020
- **Rank 2, Transfer Learning for International Crisis Response, DEEP - AIcrowd**: Jan 2020
- **Winner, AstraZeneca AI Hackathon, IIT Madras**: Jan 2020
- **Rank 1, Round 1 Food Recognition Challenge, Seerave Foundation**: Dec 2019
- **Rank 208 of 6000+ participants, IEEE CIS Fraud Detection Challenge**: October 2019
- **Rank 34, Open Images Instance Segmentation Challenge**: October 2019
- **Runner Up, Amazon Web Services (AWS) Challenge, AngelHack Global Virtual Hackathon**: July 2019
- **Winner, Indian Sub-Continent, AngelHack Global Virtual Hackathon**: July 2019
- **Rank 503 of 9000+ participants, Santander Customer Transaction Prediction** : April 2019
- **Runner Up, MotorQ Hackathon**: March 2019
- **Top 5 Teams, Major League Hacking, Local Hack Day**: Dec 2018
- **Finalist, International Youth Math Challenge**: Nov 2018
- **Indumathi Muthukumar Award**: June 2017

Scholarships

- **Merit Scholarship, SSN College of Engineering**: 2017-18
- **Rank 1, Merit Scholarship, SSN College of Engineering**: 2019-2020

Programming Skills

- **Languages**: Python, C, C++, SQL, Java, JavaScript, HTML

- **Frameworks and Technologies**: Android Studio, React, Redux, Keras, PyTorch, FastAI

Volunteering

- **Google** : Organized the Google AI Explore ML Workshop at SSN College of Engineering.

- **Stanford University**: Section Leader for CS106A, offered during COVID-19 pandemic, with 10,000 global students participating from around the world.