Rohit Midha

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EDUCATION

- **SSN College of Engineering, Anna University** Tamil Nadu, India

  Bachelor of Engineering in Computer Science and Engineering; GPA: 9.19/10.0 — *Aug. 2017 – July 2021*

  University Rank: #10 of 15000+, College Rank: #3

EXPERIENCE

- **Goldman Sachs**

  Engineering Analyst — *August 2021 – Present*

  - **Risk Analysis and Review Engine (RARE)**:
    * By automating archaic workflows, RARE lowers costs and improves the quality and UX of the review process, thus bringing transparency and effectiveness to a critical risk process.
    * Reduced review time by a third, from over 6 hours to 2 hours.
    * Engineered the backend architecture for the platform using Java micro-services and deployed via Kubernetes.
    * Designed the Stats and Management Dashboard to provide high-level insights to senior management.
    * Streamlined the data flow for calculating a key financial metric that captures Net Cash Outflow at different business hierarchies.
    * Spearheaded the initiative to onboard onto Snowflake, reducing data access time by 41%.
    * Defined SLA and SLOs for our team's offerings. Set up Prometheus for monitoring the Kubernetes deployments.
    * Mentored and trained 3 graduate-level software interns, with each getting return offers.

  Summer Analyst — *May 2020 – June 2020*

  - **Risk Metrics Inventory UI**:
    * Developed a React UI that acts as a central registry and lets users perform CRUD operations on metrics meta-data, keeping inter-dependencies consistent.
    * Reduced onboarding time from over 5 minutes to under a minute.

- **CodeFemme**

  Founder, CTO — *June 2018 – Present*

  - **Partner Schools**: Partnered with over 70 schools in the city to provide best-in-class Python workshops and class material for high school students.
  - **Te(a)chTheTeach**: Taught undergraduate-level Python and important libraries to 100+ CBSE teachers through a workshop series aimed at teaching Post Graduate Teachers (PGTs).
  - **Numpy, Pandas and Neural Nets**: Guest Lecture on the topic "Numpy, Pandas and Neural Nets" at Kendra Vidyalaya, Indian Institute of Technology, Madras. 50+ teachers from across the country in attendance.

- **AIcrowd**

  Research Intern — *March 2020 – May 2020*

  - **World Health Organization**: Implemented Recognition models to identify various types of endangered snail species in the wild.
  - **AIcrowd Blitz**: Launched the Blitz series of challenges on the platform, curating datasets and defining tasks.

- **Indian Institute of Technology, Madras**

  Research Intern — *November 2019 – May 2020*

  - **Mentors**: Professor Gitakrishnan Ramadurai, Professor Balaraman Ravindran
  - **Traffic Optimisation and License Plate Recognition**: Developed a real-time Computer Vision based system, deployed to city-wide CCTV cameras to optimize traffic lights based on predicted traffic.
    Achieved 86% accuracy in identifying license plates of lawbreaking vehicles.

- **Sigmoid**

  Data Scientist Intern — *May 2019 – July 2019*

  - **Named Entity Recognition**: Remodeled Conditional Random Fields, Recurrent Neural Networks and Long Short Term Memories for Named Entity Recognition of Medical Drugs. Increased accuracy from 77% to 81%.

Research: Posters, Publications and Talks

- **Risk Analysis and Review Engine (RARE)**: Digital Poster presented at the Goldman Sachs Internal Engineering Conference, 2022.
- **A Low-Cost Solution to the Open Images Instance Segmentation Challenge**: Poster accepted at International Conference on Computer Vision (ICCV), 2019. Poster here.
- **Transfer Learning for International Crisis Response**: Talk and Presentation at the Challenge Track of Applied Machine Learning Days (AMLD), 2020 Slides here.

Projects and Ventures

- **pharmAssist by That Medical Company**: A novel label and Android App that lets visually impaired people gain health literacy. Reads out easy instructions for pills when the prescription bottle is placed on the phone screen. Connected with Alexa for easy access. Video demo here.
- **jargone**: A web app that summarizes Terms and Conditions to keep you informed about the data companies collect from you.
- **Federated Learning for Medical Imaging**: A framework that provides a complete machine learning pipeline to let researchers and end users train any model on medical image data from various sources. Uses YAML files for simple configuration.
- **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.)

Technical Achievements

- **Runner Up, Goldman Sachs Hackathon**: 2022
- **Runner Up, Digital Poster, Goldman Sachs Internal Engineering Conference**: 2022
- **Runner Up, Innovation, Goldman Sachs Awards**: 2021
- **Rank 2, Hockey Team Classification Challenge, AIcrowd**: October 2020
- **Rank 2, Transfer Learning for International Crisis Response, DEEP**: Jan 2020
- **Winner, AstraZeneca AI Hackathon**: Jan 2020
- **Rank 1, Round 1 - 3, Food Recognition Challenge, Seerave Foundation**: Dec 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
- **Finalist, International Youth Math Challenge**: Nov 2018

Extra Curricular Achievements

- **Under Secretary General, Tech, SSN Model United Nations**: 2019-2020
- **Best Novice Speaker, Independent University Bangladesh - Parliamentary Debate**: 2019
- **Director, SRM Model United Nations, ECOFIN Committee**: 2018

Scholarships

- **Rank 1, Merit Scholarship, SSN College of Engineering**: 2019-20
- **Merit Scholarship, SSN College of Engineering**: 2017-18

Programming Skills

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

- **Frameworks and Technologies**: React, Redux, NodeJS, Kubernetes, Prometheus, PyTorch, FastAI

Volunteering

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

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