Rohan Ratwani

+1-551-285-7378 | McKinney,TX,75070 | ratwani.rohan@gmail.com | https://www.linkedin.com/in/rohanratwani/

EDUCATION

Stevens Institute of Technology, Hoboken, NJ **May 2021**
Master of Science in Computer Science **GPA: 3.8/4.0**
Coursework**:** Knowledge Discovery & Data Mining, Algorithms, TCP/IP Networking, Internet of Things, Agile
Methodologies, Special Topics in SE(Python), Web-Programming, HCI, DBMS

Gujarat Technological University, Gujarat, India **June 2019**
Bachelor of Engineering in Computer Engineering **GPA: 3.9/4.0**

TECHNICAL SKILLS

Languages: Python 3.9 (Proficient), JavaScript, YAML, C, C++, Java, R
Database Management Systems: MySQL, Snowflake, Firebase DB (NoSQL), Amazon RDS, MongoDB, PostgreSQL
Tools & Technologies: Git, Bitbucket, Linux, Jenkins, Ansible, JIRA, JMeter, HTML5, CSS3, XML, Django, Node.js, OpenCV
Big Data: Spark, YARN, Kafka, Zookeeper
Monitoring: Grafana, Datadog, Uptime Robot

WORK EXPERIENCE

Software Engineer, Securonix Inc. **July 2021 – Present**
- Spearheaded resolution efforts for priority zero critical incidents, improving app stability, memory management, and networking across 300+ production environments, achieving 99.8% uptime
- Maintained robust data pipelines and orchestrated data storage solutions within the Hadoop ecosystem using Apache SOLR and AWS Athena
- Orchestrated data pipelines for indexing and storing data on SOLR, AWS S3, and Snowflake, handling over 450k events per second (EPS) using Spark and Kafka connectors
- Engineered "SearchGPT", a text-to-query tool using custom LLMs and RAGs, awarded "Most Likely to be Productized" in a company hackathon
- Developed migration scripts for transferring data from S3 to Snowflake, ensuring seamless data transfer, minimal cutover time, and zero data gaps for 250+ customers
- Designed and implemented a custom data retention solution in Snowflake, optimizing data purging processes based on metadata and reducing costs by approximately 20%

Advanced Technology Electronics Intern, SNSR Fusion **July 2020 – July 2021**
- Applied advanced image processing techniques with multiple cameras for autonomous technology.
- Collaborated cross-functionally with Sensing, Planning, Perception, Infrastructure, Simulation, and Systems Engineering for R&D-driven alternative features.
- Developed embedded software for ADAS systems, specializing in computer vision (object detection techniques).
- Utilized Python as the main backend language, along with OpenCV and TensorFlow. Hardware tools included Raspberry Pi and Fish-eyed Cameras.

PROJECTS

Athena Enablement Automation **Jun 2022 – Jul 2022**
- Built a CI/CD Jenkins pipeline that helps update configurations on MySQL DB and creates an AWS Athena workgroup if not already present for the customer to enable WARM search on our application
- Collaborated with customer onboarding to integrate the automation process resulting in decrease of customer tickets for missing ATHENA configs and WARM search inconsistencies by 90%
- Technologies: Python3, Jenkins (Groovy), Boto3 (AWS SDK for Python), MySQL

NGO Management System **Apr 2021 – Jul 2021**
- Built a web application, iOS app and an Android app that helps communicate between Volunteers and NGO's
- Volunteers can check the list of NGO and select a time slot according to their convenience for a specific NGO and created dashboards for Volunteers and Ngo to manage profiles.
- Technologies: Ionic-React, CSS3, React JS, JavaScript and Firebase

Blog Recommendation System **Aug 2020 – Dec 2020**
- Built a web application that asks for user interests about articles then recommends top ranked articles matching the user's interests and secured the web application using middleware auth and hashed password techniques.
- Technologies: HTML5, CSS3, Bootstrap, JavaScript, Node.js and MongoDB

PUBLICATION

- **"Multifunctional HUD with Drowsy Detection and Fog Elimination Mechanism"**, Elsevier 4th International Conference on Computers and Management December 2018 (Published in Elsevier-SSRN Digital Library, Featured in **Google Scholar**)
- **"E-Verification of Driver for Road & Automobile Safety"**, Conference on Advances in Computer Technology March 2019 (Published in Journal of Emerging Technologies and Innovative Research" having UGC number:63975)