RHEA SAXENA

rhea2809@vt.edu Blacksburg, VA (515)-715-6899

EDUCATION

Virginia Polytechnic Institute and State University (Virginia Tech) *Blacksburg, VA*
Master's in Computer Science, GPA: 4.0/4.0 *August 2021 - May 2023 (exp)*
Related Coursework: NLP, Data Analytics, ML in Big Data, Social Media Analytics, Blockchain

Motilal Nehru National Institute of Technology, Allahabad (MNNIT) *Allahabad, India*
Bachelor of Technology in Information Technology , GPA: 7.5/10 *July 2016 - June 2020*

SKILLS

Programming: C/C++, Python, Java, JavaScript, TypeScript, HTML, CSS, SQL, Git, Matlab, Linux

EXPERIENCE

CITI - Pune, India — *Full Time Tech Analyst (ISG)* *August 2020 - August 2021*

- Successfully delivered advanced interactive charts for Client 360, Treasury Trade Solution CRM Dashboard using d3 and developed chart library for reusability across organization.
- Used technology such as D3, .NET framework, Angular
- ***Received a Copper Award for Works as Partner in March 2021.***
- ***Received a Bronze Award for Champions Progress in May 2021.***

Ernst & Young - Muscat, Oman— *Summer Intern* *June, 2019 –July, 2019*

- Worked on a Digital Transformation Project, for the IT Operations Division of one of Oman's Government Entity.
- Designed a Chabot integrated with EY website to provide assistance and information about EY services to prospective clients.
- Worked with basics of GIS systems, Diagflow etc

Tech Mahindra - Hyderabad, India— *Summer Intern* *June, 2018 –July, 2018*

- Developed Robotic Process Automation scripts using UiPath Studio for Automating manual processes to improve efficiency and reduce resource workload .
- Learned basics of Deep Learning and applied gained skills in implementing Real Time Object Detection and accompanying iOS app.

RESEARCH EXPERIENCE & PROJECTS

Virginia Tech - Blacksburg, VA — *Graduate Research Assistant* *August 2022 - present*

- Working with Commonwealth Cyber Initiative (CCI) to launch 5G enabled Radio test-beds in Virginia Tech that are part of a larger research network across Northern Virginia.
- The project is focused on the future of 5G Radio technology by utilising technologies such as Software Defined Radios and ML techniques to improve RF communication.
- Other responsibilities include IT development support for current testbed networks.

CogRL Exploration of an OFDM based communication model *(Duke Summer Research Program)* *2022*

- Simulated an OFDM communication model and used Q-Learning to determine transmitted bandwidth and center frequency of successful OFDM frames, with the goal of achieving interferer avoidence.
- Technologies used: GNU Radio, Python, JavaScript

System Identification From Vibration Signals Using Machine Learning *(Boeing Sponsored Grad Project)* *2022*

- Simulated a simple cantilever beam in order to perform a comprehensive review of vibration analysis and modal analysis using popular and cutting edge machine learning based anomaly detection algorithms.
- Technologies used: Python

Leveraging Rationalization and Language Models for Reviews Summarization *2021*

- Developed an approach to learn and understand reasoning of all individual user reviews of a product to generate a simplified product review summary with the appropriate sentiment as the numerical product review to help users understand the product more accurately.
- Project built in Python Leveraged models such as BERT, T5, TextRank.

Network Data Traffic Classifier using Machine Learning *2020*

- Simulated a Software Defined Network and used it to train models with various ML classification techniques/ algorithms to see which classified the traffic flows based on their protocols with the best accuracy. Such that the output can be used to modify the network to provide optimized routing paths and secure data transfer.
- Technology Used: Mininet, Openflow, Python

CERTIFICATIONS & ACHIEVEMENTS

Deep Learning Specialization
Credential ID: 695TFHUE7RLF
A set of five individual courses, covering topics like CNNs, Sequence Models, Hyper parameter tuning,Optimization etc

IBM AI Engineering Professional Certificate
Credential ID: DSRZV6EFM5QC
An online non-credit Professional Certificate, a set of six individual courses, authorized by IBM and offered through Coursera.

Founded MNNIT Allahabad's first Girls Basketball Team and won multiple tournaments. Served as the Basketball Coordinator (2017-2020), Vice-Captain (2017-2018) and Captain (2019-2020). Organised Multiple Tournaments