

# Radhika Purohit

[RAP276@pitt.edu](mailto:RAP276@pitt.edu) | [LinkedIn](#) | [GitHub](#) | Pittsburgh, USA | 412-513-9865

## SUMMARY

Experienced Software Engineer with 4 years of experience in Python, SQL, cloud technologies, and automation. Skilled in data analytics, full-stack development, and predictive modeling, optimizing workflows and system performance. AWS Certified, with experience in full stack development and big data processing. Seeking roles in software engineering or data analytics, with an interest in AI/ML.

## EDUCATION

**University of Pittsburgh** | Master of Science in Information Science | GPA: 3.6/4.0

Aug 2023 – Dec 2024

**Relevant Courses:** Neural Network, Advanced Database Management, Deep Learning, Cloud Computing

## SKILLS

**Languages:** Python, SQL, Java

**Miscellaneous:** Git, Jira, Docker, Jenkins, Unix, Django, Rest, Kafka, MongoDB, NoSQL, AWS (**Certification**)

**Core competence:** Agile/Scrum, Problem Solving, Detail Oriented, Strong Teamwork

## WORK EXPERIENCE

**Researcher | University of Pittsburgh**

Jan 2025 – Present

- Built an interactive dashboard analyzing U.S. political discourse using large-scale social media data. Preprocessed and aggregated millions of records with Python, Pandas, and SQL; developed Django REST APIs; and created dynamic D3.js visualizations. Conducted research on legislator engagement, civility, and misinformation trends, optimizing queries for scalable, real-time insights into online policymaker interactions.

**Morgan Stanley | Senior Software Engineer | OpsTech**

May 2022 – Aug 2023

- Developed an in-house **Python**-based comparator using API integrations to validate pre and post-production payment messages, reducing production defects by **40%**.
- Automated functional testing workflows with Python scripting, integrated into **Jenkins CI/CD** pipeline, reducing manual effort by **85%** and ensuring consistent, reliable software releases.
- Built a robust BDD framework in **Java** to automate notifications and SWIFT message processing using **Selenium**, streamlining payment operations, and enhancing system efficiency.

**Amdocs | Automation Engineer | Quality Assurance**

April 2019 – April 2022

- Independently **managed** the automation domain for Vodafone Turkey, ensuring seamless execution of testing.
- Created interactive **Power BI** dashboard to visualize defect metrics and **SQL** data, delivering real-time insights that accelerated decision-making for leadership.
- Executed **ETL** processes using **Microsoft SSIS**, seamlessly integrating data into Power BI for dynamic and actionable visualizations.
- Led training** for new hires at Amdocs on tools and frameworks, enhancing their integration and productivity.

## PROJECTS

**GPT-based Character-level Language Model**

- Implemented a transformer model in **PyTorch** to predict the next character in a sequence using the Tiny Shakespeare dataset. The model incorporated key components, including embedding layers, positional encodings, multi-head self-attention, and feed-forward layers with layer normalization and dropout.

**Log Analyzer:**

- Configured and deployed a multi-node Apache **Cassandra** cluster for large-scale log data storage and analysis, utilizing CQL queries for efficient data retrieval and processing.

**Neural Network for Stellar Classification:**

- Developed a multi-layer neural network using **TensorFlow** and **Keras** to classify stars based on stellar features such as temperature, luminosity, radius, and absolute magnitude. Preprocessed and scaled data for efficient model training, achieving a classification accuracy of 93%

## AWARDS AND RECOGNITION

- Received a full scholarship from the University of Pittsburgh to attend Grace Hopper Conference GHC24 (2024)
- Awarded with “MS Thanks” at Morgan Stanley (June 2023)
- “Spot Award” at Amdocs for contributions in automation and Dashboard development.