# **EASHAN JOSHI**

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#### **EDUCATION**

Master of Science (MS), Data Science (Specialization: Generative AI) - 3.74/4.00

Rochester Institute of Technology

Aug. 2022 - Dec. 2024 Rochester, NY

Bachelor of Engineering (BE), Computer Engineering

Aug. 2016 - Jun. 2020

University of Pune

Pune, India

#### **WORK EXPERIENCE**

# Research Assistant - Dynamic Prompt Engineering | Python, ML, LLMs

Aug. 2023 - Present

Dept. of Software Engineering, RIT

Rochester, NY

- Developed an analysis engine to probe DevGPT dataset, uncovering 1,957,830 ChatGPT mentions across GitHub issues
- Identified 3,050,232 ChatGPT mentions in commits, & 25,601 in discussions, utilizing GPU-accelerated tools
- Conducted sentiment analysis on GitHub issues, achieving an average sentiment score of 0.11
- · Engineered an interactive debugging system using OpenAI API, generating multi-turn queries for bug localization

#### Software Engineer | .NET, C#, JavaScript, SQL

Sept. 2020 - Sept. 2021

Yardi Software India Pvt. Ltd.

Pune. India

- Developed 30+ back-end, & 50+ front-end components in Trust Accounting module using .NET & SQL
- Optimized SQL (OLTP & OLAP) queries, achieving a 10% transparency boost client data visualization & retrieval
- Designed data pipelines & scalable solutions, reducing **financial data error rate** by **15%** in tax & insurance management
- · Collaborated with Team Lead to engineer 2 Custom Programming Reports, enhancing report generation capabilities
- Delivered on-call production support, resolving over 90 support tickets to ensure system performance & reliability

#### **PROJECTS**

# Advanced Financial Analysis & Risk Assessment of Listed Companies (Industry Project) | Python, ML Link Feb. 2024

• Executed data cleansing on a financial screening dataset with 80 indicators supplied by FinSharpe (Investment Advisor)

- Performed quantitative risk analysis on the dataset, identifying 362 high-risk stocks
- Incorporated 'FinSharpe Overall Score' for market cap segmentation, isolating 240 firms
- Administered in-depth performance evaluations that helped secure a \$120,000 investment for FinSharpe

#### **Duplicated Bug Report Detection using Siamese Convolutional Neural Network** | *TensorFlow, NLP* Link

May 2023

- Harnessed TF-IDF & Cosine Similarity to process Eclipse Bug Report Dataset, achieving a categorization accuracy of 93%
- Employed BM25 on similar and dissimilar datasets, achieving recall rates up to 2.24% and 6.25% respectively
- Implemented Shapiro-Wilk test on BM25 recall rates across datasets, revealing **p-value of 0.17** indicating normality
- Evaluated a Siamese CNN model on textually similar & dissimilar datasets, obtaining AUC scores of 0.54 & 0.58

# Multiclass Image Classification using Deep Convolutional Neural Network | Python, TensorFlow Link

Nov. 2022

• Created a DCNN by modifying VGG16 architecture achieving **80% accuracy** on Tiny ImageNet dataset

# **TECHNICAL SKILLS**

Programming Languages: Python, JAVA, VB.NET, C#, C++

Databases & Management: SQL, MySQL, PL/SQL, MongoDB, OLTP, OLAP, ETL, Data Pipelines

Developer Tools & Frameworks: OpenAI API, AWS Services, Linux, Git, Apache Spark, .NET, VS Code, Visual Studio, SAS,

Pentaho, PyCharm, IntelliJ, Eclipse

Libraries: Scikit-learn, Numpy, Pandas, Matplotlib, Keras, TensorFlow, NLP, PyTorch, rank\_bm25

Web Technologies: HTML, XML, CSS, PHP, JavaScript, JSON

#### **ADDITIONAL**

**Leadership**: Recreation & Fitness Supervisor - Supervised a team of 10 Fitness Attendants at RIT Fitness Center **Certifications**: <u>AWS Certified Cloud Practitioner</u> (Amazon Web Services), <u>Google Project Management</u> (Google)