Shivani Gowda

✉ shivanigowdaks@gmail.com | 📞 (213) 442-5656 | github.com/sgowdaks | linkedin.com/in/sgowdaks | Seattle, WA

EDUCATION

Loyola Marymount University   Los Angeles, CA
Master of Science in Computer and Information Technology, GPA: 3.67   *Aug 2021 – May 2023*
- Course work: Natural language processing, machine learning, database systems, secure software development.
- Received Outstanding Graduate award in Computer Science issued by Frank R. Seaver College of Science and Engineering

Amrita School of Engineering   Bengaluru, KA, IN
Bachelor of Technology in Electrical and Electronics Engineering, GPA: 3.43   *Jun 2015 – May 2019*

SKILLS

Languages: Python, Bash, Java, JavaScript, SQL

Tools and technologies: Huggingface transformers**,** PyTorch, Git, Unix Shell Scripting, Scikit-learn, AWS, Pandas, Flask, Amazon SageMaker, SQLite, React.js, Postman, Selenium, Scrapy, Apache airflow, Microsoft Excel

EXPERIENCE

pixstory.com   Remote
Machine Learning Engineer   *Aug 2023 – Present*
Machine Learning Intern   *Jan 2023 – May 2023*

- **Large Language Models (LLM):** Deployed LLMs using HuggingFace transformers, enhancing system efficiency through quantization for faster inference. Conducted comprehensive benchmarking to ensure optimal performance of various LLM's.
- **Data Pre-processing Pipeline:** Spearheaded the development of a pipeline for Pixstory's Retrieval Augmented Generation based conversation search. Leveraged Apache Airflow Directed Acyclic Graphs for efficient workflow management.
- **Vector Database Management:** Strategic selection and implementation of a cost-effective and reliable vector database, striking a balance between reliability and cost-efficiency to enhance system efficiency.
- **Hate Speech Detection:** Trained a transformer-based model to detect hate speech in 6 languages, implementing several approaches to improve recall and precision.
- **API Development and Integration:** Developed a RESTful API for data collection, integrated it with a database, and hosted it on an Amazon EC2 instance. Implemented dashboard to monitor annotator performance and ensure data quality.

Loyola Marymount University   Los Angeles, CA
Graduate Research Assistant   *Jun 2022 – Dec 2022*

- **Model Fine-tuning and Optimization:** Optimized transformer-based models using GPU hardware acceleration and employed a range of evaluation techniques to better understand their performance.
- **Data Preparation:** Made a dataset more suitable for identifying multiple categories through careful labeling. Used the DALL·E API to gather a wide variety of images for further study.
- **Data Scraping:** Used Selenium Chrome Driver (a tool for automating browsers) to efficiently gather valuable data from various online sources for further analysis.

IBM   Bengaluru, KA, IN
Application Developer   *Dec 2019 – May 2021*

- Raised efficiency by identifying bottlenecks and removing redundancies in project requirements with suitable rules and fragments in CPQ tool with efficient algorithms.
- Assisted team in migrating to RedHat OpenShift platform; provided a secure and easy to use cloud platform.
- Led 5 minor releases where I analyzed multiple defects and resolved the issues. which improved the quality of the product by avoiding long time waits for the changes and this strengthened our clients' trust in our team.

PUBLICATIONS   Google Scholar 🔗

- Master's thesis**:** Improving Multi-Modal Food Detection System with Transfer Learning[1]
- **Gowda, Shivani**, Yifan Hu, and Mandy Korpusik. "Multi-Modal Food Classification in a Diet Tracking System with Spoken and Visual Inputs." In ICASSP 2023-2023 IEEE ICASSP, pp. 1-5. IEEE, 2023.
- Reddy P. Rampulla, **Shivani Gowda**, S. Charitha, and R. Mahalakshmi. "Review and Redesign of Pedal Energy-Solar Power Augmented Hybrid Bicycle." In 2020 ICSSIT, pp. 376-380. IEEE, 2020.

---

[1] https://digitalcommons.lmu.edu/etd/1238