VINEET KALGHATGI

United States | [Linkedin](#) | +1 7164006846 | [vkalghat@gmail.com](#) | [Github](#) | [Website](#)

SKILLS

Languages:	Python, Javascript, Java, Typescript, Go, Bash
Web Technologies:	React.js, Angular, Node.js, Next.js, Django, Flask, Flutter, Express.js
Database:	MySQL, PostgreSQL, MongoDB
Technologies/OS:	Docker, Git, Kubernetes, Google Cloud Platform, AWS

PROJECTS

Dev Diaries [Link](#) | Go, GORM, Gorilla/Mux, MySQL
- Engineered a high-performance backend for a **blog REST API** in Go following the **MVC** framework,
- Architected the database schema consisting of **6** tables in **MySQL**, ensuring the integrity of relations between entities, resulting in a **40%** decrease in query times
- Implemented **Bcrypt** password hashing and **JWT** authentication, improving security

Restaurant E-menu [Link](#) | Next.js, React.js, TypeScript, Node.js, Express.js, MongoDB
- Programmed an intuitive menu management system, simplifying digital menu updates for restaurant owners, averaging **250** monthly visitors
- Designed an **authentication s**ystem leveraging **Google Firebase** for secure login, signup, password retrieval and email verification

Inverted Index Search Engine | Python, Flask, Gunicorn, Google Cloud
- A search engine written in **Python (Flask)** leveraging an inverted index to rank **5000** documents on tf-idf scores
- Implemented **information retrieval** techniques to index a corpus of **5000** documents achieving sub **50 ms** latency

Data Volume Reduction [Link](#) | Python, Django, SQLite, Next.js, React.js, IBM Cloud
- Spearheaded development of a cloud-based application, envisioned in collaboration with **IBM** and the **Enterprise Neurosystem Group** that filters datasets through metadata of individual files resulting in lower bandwidth usage
- Developed a module that enabled seamless downloading, decompression, and indexing of datasets from diverse URLs, resulting in a robust API

EXPERIENCE

University at Buffalo   **Buffalo, NY**
Research Assistant (NLP)   Feb 2024 - Present
- Integrated **sentiment analysis** capabilities into chat interface prototypes, to empower disabled individuals to engage effectively in conversations resulting in a **25%** increase in positive user feedback
- Developed custom mapping strategies to refine emotion labels, enhancing sentiment analysis predictions with a concise set of **6** distinct emotional categories
- Fine-tuned sentiment analysis models utilizing **Python, PyTorch** and **Large Language Models (BERT, RoBERTa)** to predict **6** nuanced emotion labels from conversational utterances

Tata Consultancy Services   **Bengaluru, India**
Software Engineer   Aug 2021 - Jul 2022
- Managed security operations using CA PAM, a privileged access manager, for a leading Swiss bank, resulting in smooth operations for over **4000** clients
- Collaborated with cross-functional teams from EMEA and APAC in resolving security issues that occurred during server onboardings. Utilized **SQL** to generate reports offering valuable business insights.
- Mentored colleagues, imparting expertise in **Bash** scripts and **Python** scripts, resulting in a **40%** decrease in troubleshooting time for live production servers
- Automated onboarding processes of HPiLO servers in bulk with **Python** scripts, leading to an outstanding **85%** reduction in processing times

Tata Consultancy Services   **Bengaluru, India**
Software Engineer Intern   Jul 2020 - Aug 2020
- Externalized data from Cucumber feature files with **Java** to a **MongoDB** Database resulting in centralized storage and a **45%** reduction in duplicated testing data
- Built a dashboard with **Angular**, **Typescript**, **Node.js** and **Express.js** providing an interface for data management that eliminated redundant CSV files
- Innovated an advanced automation tool using **HTML**, **CSS**, **JavaScript**, and **Flask (Python)**, streamlining mobile app testing processes and saving the QA team **10** hours per week

EDUCATION

University at Buffalo, The State University of New York   **Buffalo, NY**
Master of Science in Computer Science, GPA : **3.7/4**   Aug 2022 - Dec 2023
Coursework: Blockchain, Pattern Recognition, Analysis of Algorithms, Fundamentals of Programming languages, Data Intensive Computing, Data models and query language, Project Management, Information Retrieval

Dr. Ambedkar Institute of Technology   **Bengaluru, India**
Bachelor of Engineering in Computer Science and Engineering, GPA : **8.84/10**   Aug 2017 - Jul 2021