VINAYAK BHOSALE (Software Developer/Engineer)

vinubhosale.us@gmail.com | vi218297@ucf.edu | +1 689-808-3457 | United States (open to relocate within USA)
LinkedIn: https://shorturl.at/bjHXZ   **Portfolio:** https://shorturl.at/vCD26   **Github:** https://github.com/vinayak-97

Education

University of Central Florida, United States   **Aug 2022 - May 2024**
- **Master of Science** in Computer Science | GPA: **3.9/4**
- **Coursework:** Data Structures & Algorithms, Advanced Artificial intelligence, Advanced Computer Architecture, Design & Analysis of Algorithms, Machine Learning, Computer Understanding Natural Language (NLP), Computer Forensics II, Machine Learning methods for Biomedical data, Statistics and Data Mining, Incidents Response Technologies

MVJ College of Engineering, Visvesvaraya Technological University (VTU)   **Jul 2015 - Aug 2019**
- **Bachelor of Engineering** in Electronics and Communication | CGPA: **8/10**
- **Coursework:** Programming in C & Data Structures, Operating System, Data Structures & Algorithms using C++, Object Oriented Programming using C++, Machine Learning, Management & Entrepreneurship Development, Microcontroller, Microprocessor, Calculus I&II, Statistics

Full Time Experience

Software Developer | University of Central Florida | part-time   **Aug 2023 - Present**
- Implemented strategic enhancements to the university's online ticketing system, leveraging data analysis to identify key areas for improvement. This initiative resulted in a notable increase in ticket sales by up to **10%** for university game events.
- Developed and enhanced features for the university's online ticketing system, leveraging a combination of frontend technologies such as JavaScript and Angular, along with backend technologies like Next.js and MongoDB.

Software Developer | i2soft Technologies   **Sep 2020 - Apr 2022**
- Orchestrated Docker containers using Kubernetes to ensure efficient deployment and scaling of applications, achieving a **30%** reduction in deployment time and a **15%** improvement in resource utilization. Leveraged a MERN technology stack including MongoDB and Node.js for database and RESTful API development.
- Conducted regular code reviews using tools like Git and Bitbucket to maintain code quality and adherence to coding standards.
- Designed and maintained web applications utilizing Java and the Spring framework, leading to a substantial **20%** enhancement in application performance.

Software Developer | Peopleclick Techno Solutions pvt ltd   **July 2019 - June 2020**
- Built and implemented user-friendly interfaces using HTML, Tailwind CSS, JavaScript and React.js resulting in a significant **25%** increase in user engagement and satisfaction.
- Developed efficient RESTful APIs with Python, Java Spring Boot and FastApi, improving data retrieval efficiency by **35%**, which positively impacted overall system performance.
- Effectively contributed to the development of sophisticated machine learning and deep learning algorithms, achieving a **90%** accuracy rate, using Scikit-learn, Tensorflow and Pytorch to address complex problem domains.

Software Engineer | Livewire   **Jan 2019 - June 2019**
- Devised and Programmed complex software features using frameworks such as Django and Flask, collaborating seamlessly with five cross-functional teams to meet project objectives and enhance product functionality.
- Actively participated in Agile Scrum development processes, including sprint planning, daily stand-up meetings, and backlog grooming, ensuring effective project management and streamlined development.
- Deployed web applications on AWS Elastic Beanstalk and utilized AWS Amplify for seamless hosting and scaling, resulting in a **40%** increase in application scalability.

Skills

- **Programming Languages:** Python, JavaScript, TypeScript, Java, C, C++
- **Frontend & Backend Web Frameworks:** HTML, CSS, Bootstrap, Tailwind CSS, React, Node.js, Spring Boot, Django, Flask
- **Databases (SQL and NoSQL):** SQL, PostgreSQL, MySQL, MongoDB
- **Data Science, AI, Machine Learning & Deep Learning:** Scikit-Learn, Pandas, Matplotlib, Seaborn, Numpy, Statsmodels, Opencv, Langchain, Pytorch, Tensorflow & Keras
- **Technologies:** Docker, AWS (Amazon web services) fundamentals, Git, Github

Projects

ChatGPT Clone :   (HTML, CSS, JavaScript, React, Python, Django, Docker, AWS EC2, PostgreSQL)
- Developed a ChatGPT clone web application that enables users to have natural language conversations and obtain accurate responses.
- Achieved a **80%** uptime rate on AWS (Amazon Web Services), guaranteeing uninterrupted user access.
- Continuously fine-tuned the NLP model, resulting in a **47%** reduction in user query misinterpretation.

English Language Query Interface for DataBases :   (Java, Spring Boot, Docker, MySQL, HTML, CSS, JavaScript, React, Python)
- Programmed an Generative AI-based website that allows users to retrieve information from their database using natural English language instead of SQL, improving query efficiency and accuracy by **85%**.
- Empowered non-technical users to effortlessly query their database using plain English instead of SQL through the application, resulting in a **42%** improvement in data accessibility and a **28%** rise in data-driven decision-making among non-technical professionals.
- Utilized AI models to auto-correct and suggest alternative queries for users, leading to a **65%** reduction in query errors.

YouTube Videos Summarizer :   (MongoDB, Python, JavaScript, Express.js, React.js, Docker, AWS S3, HTML, CSS, Node.js (MERN))
- Designed a website application that leverages natural language processing and machine learning techniques to automatically summarize YouTube videos.
- Achieved an average video summarization accuracy of **94.5%**, where **94.5%** represents the percentage of key points and important content retained in the summary compared to the original video.
- Integrated the YouTube Data API, allowing users to input video URLs or search keywords to select videos for summarization, enhancing the user experience by **55%**.

Leadership / Achievements

- Attained **5th** place out of **40** participants in the Generative AI challenge at the Morgan & Morgan for a hacker hackathon.
- Engineered and published Python packages/libraries for deep learning and machine learning on pypi.org (python's official open source contribution Index):   1) Assembled an Image Data Importer package for Deep Learning.   Link
                                          2) Devised a Train, Validation, and Test Split package for Machine Learning.   Link
- Authored and published a paper on the Automatic Billing System Using Li-Fi Module in the IJMTE Journal (International Journal of Management Technology and Engineering) Paper Link