Bhagya Raj Varadaraju

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EDUCATION

UNIVERSITY OF FLORIDA   Gainesville, Florida
Master of Science - Computer & Information Science & Engineering (CGPA: 3.95/4)   *August 2022 - May 2024*
- Coursework: Distributed Operating System Principles, Natural Language Processing, Data Engineering

SASTRA UNIVERSITY   Thanjavur, India
Bachelor of Technology - Computer Science & Engineering (CGPA: 8.29/10)   *June 2015 - May 2019*
- Coursework: Data Structures, Software Engineering, Analysis of Algorithms

SKILLS

Programming Languages: Python, Java, SQL, JavaScript, C, C++, Erlang, Shell script
Databases & Frameworks: PostgreSQL, MySQL, MongoDB, React, NodeJS, Express.js, FastAPI, Spring Boot
Tools & Platforms: Git, GitHub, GitLab, Swagger, JIRA, Wireshark, Linux, Azure
Certifications: CodePath Advanced Web Development, CodePath Intermediate Web Development

WORK EXPERIENCE

Plainspoken   Gainesville, Florida
Software Engineer Intern   *October 2023 - Present*
- Developed the backend adhering to an OpenAPI specification, for an energy cost savings application (SICD) at Fort Moore which detects occupancy patterns and raises alerts, using the FastAPI framework
- Devised the database schema utilizing Azure Data Studio and subsequently deployed it to Azure SQL

HP Inc. (Hewlett-Packard)   Bengaluru, India
Software Engineer   *August 2019 - July 2022*
- Enabled sales worth $100M that required a FIPS 140-2 certificate by integrating and registering wolfEngine as an OpenSSL engine for using wolfCrypt, thus equipping printers with a FIPS cryptographic module
- Reduced the latency by 50% in encrypted connections by bringing in TLS 1.3 support through the upgrade of the OpenSSL version to 1.1.1b and handling the required API changes for migration
- Programmed ECC certificate creation and validation capability using OpenSSL library in C++
- Experienced in Agile development and collaborating with global teams to deliver successful projects

Research and Development Intern   *January 2019 - July 2019*
- Helped the team secure big deals worth $70M with Walmart, by researching and prototyping an Embedded VPN client for enterprise printers using OpenVPN

PROJECTS

TechTorum *[React, Chakra UI, Express.js, SQL, PostgreSQL]*   *November 2023*
- Developed a responsive full stack web app for publishing content related to technology. Users can create, edit, and delete posts. Also, added search by title, sort by timestamp/upvotes features in the landing page
- Built a separate page for when user clicks on a post, where users can leave comments and upvote it

Twitter Clone *[React, Erlang]*   *December 2022*
- Devised and implemented backend APIs for registering, tweeting, subscribing, retweeting functionality using Erlang's cowboy (REST) library. Also, added a feature for querying tweets containing specific hashtags

Handwritten Mathematical Symbols Classification *[Python, Machine Learning]*   *November 2022*
- Achieved an 88% accuracy in classifying basic handwritten math symbols using PyTorch and OpenCV by applying Transfer learning (ResNet)