Sarthak Bhatt

sarthakbhatt@gmail.com | GitHub |LinkedIn | 916-490-8370

SUMMARY

Actively seeking full-time opportunities in Embedded Software Engineering and DevOps Engineering, leveraging my problem-solving and analytical skills to develop and deploy high-quality software and hardware products.

EDUCATION

Master of Science Degree in Computer Science, California State University, Sacramento — July 2023

Bachelor of Science Degree in Computer Science, UTU, UK, India — May2016

SKILLS

- Programming/Scripting languages: C, C++, Python, PostgreSQL, Bash.
- GPU architectures: Intel (Kernel Mode Driver and Power and Performance), AMD.
- Operating Systems: Linux, Raspbian, Windows, MacOS.
- Driver Development: Windows Driver Kit (WDK), Windbg, KVM GT, Microsoft Visual Studio.
- Soft Skills: Debugging, Problem-Solving, Communication, Teamwork, Ability to Learn Quickly.
- Methodologies: Agile, Scrum, Jira.
- Software tools**:** Conda, Docker, Git, CMake, QuickBuild, Doxygen, Streamlit.

EXPERIENCE

Core Graphics Software Engineer **Intel Corporation** Sept 2022 - Aug 2023

- Leveraged knowledge in C/C++ to optimize features such as Turbo Boost and various microcontroller-based schedulers.
- Proven expertise in cleaning up features related to Intel Graphics Turbo Boost technology, increasing readability by 10%.
- Debugged and identified root causes of Intel GPU Graphics Driver issues in virtualized environments using Windbg and KVM GT on Windows to reduce memory leaks by 99.9%.
- Engineered a benchmark tool for debugging kernel mode driver and Power and Performance using knowledge of Python and C++; the tool enhanced the SDLC by 25% and received formal recognition from the senior leadership team.

SAP HANA Consultant **Waddaya Solution** May 2015 - Aug 2018

- Demonstrated comprehensive expertise in Data Modelling, Analytical View Development, and user management in SAP HANA.
- Developed and deployed 20+ custom automation tools using Bash and Python; slashed average system administration time by 50% and saved 50+ hours per week.
- Automated system backups and designed real-time monitoring alerts using shell scripting for critical systems; saved 20+ hours per week and improved system availability by 25%.
- Managed Linux based production servers, ensuring 99.9% production server uptime and optimal system performance.
- Collaborated with the security team to perform regular audits, vulnerability assessments and implement best security practices.

PROJECTS

- GPU Telemetry Tool (C++, CMake, Git, QuickBuild): Led a real-time GPU performance project using C++ and CMake for Intel, cutting debug time by 25% and boosting testing accuracy by 30%, and implemented an automated build deployment using QuickBuild, slashing deployment time by 60% and earning acclaim from management and peers.
- A Dashboard For Canines Suffering from CHF (Python, Matplotlib, Plotly, NumPy, Pandas, Scikit-learn, Streamlit): Crafted a dashboard using Streamlit and Scikit-learn in Python that classifies the current condition of canines suffering from Congenital Heart Failure with 98% success rate with features like generating PDF reports of the patient with interactive charts made in real time just after the user inputs.
- Autonomous Line Follower Robot (C, ATmega168 microcontrollers (Arduino Duemilanove), Motor Driver, Infrared sensor): Successfully designed and implemented a fully functional autonomous line follower robot using an ATmega168 microcontroller, motor driver, and infrared sensors. Utilized the ATmega168 microcontroller for movement control and infrared sensors for path tracking.
- Open-Source Contributor to Pandas library (Python, Data Analysis, GitHub): Actively improved core features and increased overall effectiveness, which benefited the Pandas library's several thousand users. This involvement encouraged an increased knowledge of Python, methods for data analysis, and group development of software in an open-source environment.

PUBLISHED PAPER

Bhatt, **S.**, Jain, P. (2016). Face Detection & Color Detection Controlled WMR Using MATLAB. *IJSER*, 7(01), 1601-1603