Kiran Gouttumukkala

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US Citizen

Technical Skills

Languages: Java (4 yrs), Python (4 yrs), Embedded C/C++ (4 yrs), Dart (2 yrs), Swift (2 yrs), SQL (1 yr), C# (<1 yr)
Developer Tools/ Operating Systems: Git, Google Cloud Platform, VS Code, Visual Studio, Eclipse, XCode, Android Studio, Solidworks, Jupyter, Docker, Salesforce, Sharepoint, Linux (3 yrs)
Libraries: NumPy, Pandas, Seaborn, Matplotlib, Plotly, Scikit-Learn, Tensorflow
Frameworks: Flutter (2 yrs), .NET (<1 yr)
Hardware Debugging and Testing Skills: I2C / SPI / UART (3 yrs), Oscilloscope / Logic Analyzer / DMM (4 yrs), JTAG Debugger (1 yr)

Experience

Power BI Specialist (Contract) February 2025 – Present
Aquarient Technologies *Newbury Park, CA*

- Integrated Salesforce Sales Cloud with Power BI to extract, transform, and analyze sales data for business insights
- Developed 7+ interactive Power BI reports and dashboards using GIS, enhancing data-driven decision-making
- Investigated and tested Power BI dashboard embedding in SharePoint for real-time data updates

Power BI Intern May 2022 – August 2022
ILink Digital *Seattle, WA*

- Created compelling and informative Power BI visuals, enhancing data presentation and interpretation, and leveraged popular Python libraries to enrich data anaylsis capabilities
- Implemented machine learning models using TensorFlow, driving insights from large datasets and optimizing data-driven decision-making processes
- Developed and integrated Python scripts within Power BI, streamlining data processing, and enhancing visual reporting functionalities

Projects

Intelligent Hydration Bottle | *C++, Flutter, SQFLite, Solidworks, KiCAD* May 2023 – Present

- Founded Vitura and developed the initial prototype, integrating sensors and modules with custom PCB design
- Created and optimized embedded C++ software for sensor data capture and processing
- Designed a user-friendly Flutter mobile app for real-time hydration tracking and data review
- Implemented Bluetooth connectivity and SQFLite for seamless data transfer and local storage

Pallet Tracker | *C/C++, Azure, SQL* January 2024 – December 2024

- Worked with a team of 5 to research and develop a solution for Dr. Laszlo Horvath, the Director of the Center for Packaging and Unit Load Design at Virginia Tech
- Researched various solutions and selected ultra high frequency RFID scanners for efficient pallet tracking
- Developed and programmed a microcontroller to collect and send real-time data from RFID scanners to an Azure SQL database using the IoT
- Collaborated with team members to ensure seamless communication between hardware components and database integration

Wireless Sensor Node | *C/C++, Flutter* June 2023 – August 2023

- Developed a wireless sensor node with over 85% power efficiency, proven through rigorous testing
- Implemented a battery system with solar recharging capability using a boost converter
- Designed and implemented a low-power mode, achieving 24-hour battery life with Bluetooth active
- Developed a Flutter app to serve as a GUI for Bluetooth-based temperature data retrieval
- Collaborated with a team to optimize circuit design for reduced noise and enhanced signal quality using hardware debugging techniques

Education

Virginia Tech (ECE) 2020 - 2024
Bachelor of Science in Computer Engineering/Machine Learning, Minor in Computer Science *Blacksburg, VA*

Courses

Courses Taken: Signal and Systems, Machine Learning, Digital Image Processing, Computer Architecture, Computer Networking, AI, Senior Design Project, Embedded Systems, Circuits and Devices, Physical Electronics, Applied Software Design, Digital Design