

Arjan Gupta

arjangupta95@gmail.com | 661-699-3095 | Kansas City, MO | github.com/arjangupta

EDUCATION

UNIVERSITY OF KANSAS | BACHELOR OF SCIENCE IN COMPUTER ENGINEERING, MATHEMATICS MINOR
Lawrence, KS | August 2013 - May 2017 | KU-IEEE Full Tuition Waiver Scholarship

WORK EXPERIENCE

LINDSAY CORPORATION | FIRMWARE ENGINEER

Olathe, KS | December 2021 – present

- Completed firmware-focused replacement of Sub-GHz mesh network functionality on a legacy product
- Improved GLONASS/GNSS functionality on a sub-system of one of Lindsay's pivot irrigation products
- Modifying the firmware on Lindsay's Smart Pivot to replace Modbus RTU communication with MQTT

AGI SURETRACK | EMBEDDED SOFTWARE ENGINEER I & II

Lenexa, KS | October 2019 – December 2021

- Coordinated engineering work as a Team Lead, guided productivity and helped meet milestones
- Redesigned and greatly improved the Gateway codebase for modularity and code-coverage
- Helped maintain LiDAR product, where a major portion of the redesigned Gateway code was re-used
- Solved pre-release issues in FreeRTOS usage of Cellular Soil Probe product
- Aided firmware development for Portable Auger product with ESP32 SoC
- Implemented on-site diagnostics (LEDs, logs view) for device installation and connection diagnosis
- Implemented a backend web-service for automated firmware updates
- Proved and integrated 3G & 4G cellular IoT capabilities of the Gateway product for wider sales
- Inherited ownership of the Gateway product, brought it to market-release in 10 months

ZOLOZ | SOFTWARE ENGINEER

Kansas City, MO | June 2017 – October 2019

- Developed and maintained camera-capture and biometric matching systems
- Supported developers internationally for a time-pressed product demonstration in Wuxi, China
- Implemented data-collection applications on Android to assist R&D projects
- Supported several all-day data collection sessions in KS and OH as the sole on-site engineer
- Implemented and optimized C++ image scaling and compression algorithms
- Supported the R&D department to fine-tune several computer vision models for object detection
- Traveled to New Delhi, India to assist the integration with major payment services app called Paytm

SKILLS

PROGRAMMING LANGUAGES

C/C++, Python, TypeScript/JavaScript, SQL, Bash

TOOLS

Git, VS Code, Unix-like command-line, CMake, Makefiles

TESTING FRAMEWORKS

GTest, Jest, unittest, FFF

OPERATING SYSTEMS

Ubuntu with i3, Windows 10 (with WSL 1, 2), Debian, MacOS, FreeRTOS, emBOS

RESEARCH WORK

COMPUTER VISION RESEARCH UNDER DR. GUANGHUI WANG

Co-authored a research paper at KU ITTC on an object tracking algorithm for UAVs. Created ground-truths, wrote code to test the efficiency of the algorithm (in MATLAB). Reported the results for the paper.