Ian Klask

Embedded Software Engineer

552 Menker Ave
San Jose, CA, 95128
(408) 599-9650
ianklask@gmail.com

EDUCATION

Depaul University, Chicago, IL - *Graduated June 2018*

CUMULATIVE GPA: 3.833

B.S. in Computer Science - *Concentration in Game Systems*

SKILLS

Programming Languages	C, C++, C#, Java, Python, Scala, Swift
Software	Visual Studio, STM32Cube, Crossworks, Xcode, Eclipse, GNU ARM toolchain, GDB, EAGLE, Git, P4V, Doxygen, Bash, Linux
Hardware	Oscilloscope, Logic Analyzer, Multimeter, ARM Cortex-A5, JTAG, J-Link, I2C, SPI, UART, RS232, RS485

EXPERIENCE

Amulet Technologies, Campbell, CA - *Engineering Intern*

AUGUST 2018 - DECEMBER 2018

- Created board support package for bare metal development on ARM Cortex-A5 SoC utilizing GNU Arm Embedded Toolchain with gcc-arm-none-eabi.
- Extended C libraries for accessing peripheral IO on a Cortex-A5 SoC. The library provides a high level API for register access to SPI, I2C, and UART peripherals in low level C
- Created example applications for interfacing with external sensors and accessing IO

Amulet Technologies, Campbell, CA - *Firmware Engineer*

JANUARY 2019 - PRESENT

- Ported ESP serial flasher from python to native C for field programming ESP32 microcontrollers
- Developed functional test environment for multiple ARM Cortex based devices
- Created and supported firmware for factory end of line test fixtures
- Work with customers to troubleshoot firmware related issues
- Scripted flash programming tools for assembly line in-system programing
- Moved build environment and toolchain to Visual Studio for VisualGDB JTAG debugging
- Developed VScode extension with autocomplete features for internal scripting language using ANTLRv4 for parsing and LSP standard for the language server
- Wrote transpiler frontend using ANTLRv4 for speeding up compilation of internal scripting language