Kai Arsenault

463 Park Dr, Apt 17
Boston, MA 02215
(781)-307-0654

kaimarsenault@gmail.com
github.com/kai-arsenault
linkedin.com/in/kai-arsenault

Education

Wentworth Institute of Technology | Boston, MA — Expected Apr 2021
Bachelors of Science, Computer Engineering — GPA 3.78
Minor, Computer Science — Dean's List
Member of IEEE-Eta Kappa Nu (IEEE-HKN), the honor society of IEEE

Relevant Coursework
Computer Architecture, Advanced Digital Circuit Design, Hardware security, Analog Circuit Design
Signals and Systems, Data Structures, Computer Networks, Microcontrollers Using C

Related Experience

Defense and Aerospace Software Intern, Teradyne | Boston, MA — Jan - Dec 2020
Implemented a C++ loopback test for a fiber-optic device with uart protocol.
Merged C/C++ and C++/CLI projects and added features to API and GUI (C#).
Created PowerShell scripts to compare a list (.csv) of programs and a list of files with their checksum values against a local system for missing programs or files.
Upadated front and back end of .NET applications (WinForms and WPF).
Wrote documentation using doxygen for C++ and .NET applications.
Worked in teams using Azure DevOps and Team Foundation Server (TFS).

Software Engineer Intern, Nasuni | Boston, MA — May - Sep 2019
Designed, implemented and tested a python tool suite that extracts and builds the lifecycle of filesystem objects on a single on-premise NAS appliance or multiple such geographically-distributed appliances.
Worked in teams using Agile project management through JIRA

Skills

Programming Languages:
Python, C++, C, Verilog, VHDL, PowerShell, Java, C# (WPF and WinForms), Bash, LaTeX
Technical Skills:
Linux (Debian, RedHat), Git and Azure DevOps, .NET Framework, Analog and digital circuit design
Agile project management (JIRA), NuGet package management, Arduino, VMWare, Vim
Test Instruments:
Oscilloscope, wave function generator, digital multimeter, waveform generator, power supply

Academic Projects

Triple DES Encryptor/Decryptor | Hardware Security | Individual — Oct 2019
Wrote Python application that can encrypt and decrypt a message using a triple DES algorithm

Microcontroller Communicaiton | Microcontrollers in C | Team of 3 — Apr 2019
Used C to program a PIC16F87X microcontroller to read in a voltage and then transmit it to another PIC16 using i2c based protocol.
Reading and writing out to microcontroller's registers to enable functionalities such as the timer ISR and to manipulate data using shift registers