Noah Saffer

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EDUCATION

WASHINGTON UNIVERSITY IN ST. LOUIS

College of Engineering
Dean's List
Cumulative GPA of 3.4

Double Major
BS in Computer Engineering
Expected May 2020 | St. Louis, MO

BS in Computer Science
Expected May 2020 | St. Louis, MO

LINKS

Github:// Saffsanity
LinkedIn:// noahsaffer

COURSEWORK

UNDERGRADUATE

Introduction to Systems Software (361S)
Computer Architecture I (260M)
Computer Architecture II (362M)
Operating Systems Organization (422S)
Computer System Design (462M)
Object-Oriented Software (332S)
Cloud Computing with Big Data (427S)
Software Engineering Workshop (437S)
Digital Systems Laboratory (465M)

SKILLS

PROGRAMMING

Proficient:
Java • C • VHDL • Python • C++ • Bash
Significant Familiarity:
Verilog • ExpressPCB • SQL • XML • Assembly • HTML • CSS • Javascript
Slight Familiarity:
C# • Vex Robotics • Xcode • Gamesalad

MADE IN LaTeX

EXPERIENCE

AMAZON.COM, INC. | Software Development Engineer Intern

Summer 2018 | Seattle, WA

- Twelve week internship in which I created and deployed software to production for Amazon Prime Video with one downstream consumer in production.
- Created a directed acyclic graph to perform a pipelined workflow for Live Video and Just After Broadcast data. Furthermore, I helped the artwork team with their workflow, since I pioneered the live events workflow described above.
- Integrated with young and volatile services within Amazon's newest generation of its video architecture.
- Created end-to-end testing, integration testing and unit testing for all of the software created, including over 85% unit testing coverage and over 80% branch coverage.
- Gave input on the high-level design of Prime Video's live events architecture within the Code Design Review (CDR) and Project Design Review (PDR) processes.
- Defined in-production POJOs, abstract classes and interfaces.

COMPUTER DESIGN I AND II | Head Teaching Assistant

2016 – 2018 | Washington University in St. Louis | St. Louis, MO

- CSE 260M: After performing extremely well in a course meant for Juniors and Seniors as a Freshman, I was hired as a TA, and subsequently rehired for Spring 2018 as the head TA. I also helped students create FPGA designs including basic RISC processors and combinational logic
- CSE 362M: After finishing with the highest class average as a Sophomore in a course meant for Juniors and Seniors, I was hired as the head TA. I worked with students to design a video output from an FPGA to VGA and write to the display via microcode commands for a RISC

ZATNA LLC | Lead Programming Instructor

Summer 2017 | Martinsville, NJ

- Taught high school and middle school children Intro to Electrical Engineering, Data Structures and Algorithms in Java, Python, C#, Unity, Tynker and GameSalad.
- I was promoted to the lead instructor position during the summer due to my excellent performance and ability to handle increased responsibility.

PROJECTS AND ACHIEVEMENTS

- Created a fully functional Bluetooth-to-VGA adapter with an FPGA that could display a character stream from a mobile app (VHDL, ExpressPCB, Cordova)
- Created a 32-bit CPU using an FPGA that was based on a Simple RISC with microprogramming and expanded it in my free time (VHDL, Verilog).
- Worked on a Vex bot with 8-way traversal using omnidirectional wheels (Vex)
- Fully re-created the NES Classic Duck Hunt with Mouse support (Visual Basic)
- Made a mobile app in HTML, CSS and Javascript and ported the app to mobile platforms with Cordova (HTML, CSS and Javascript)
- Worked on 5 apps that were published to the Apple App Store (iOS).
- First place in the Hardware portion of HackMHSII, the hackathon at Millburn High School where I created a VR skee-ball in Unity for HTC Vive within the 24 hour timeframe
- Modified Microsoft Kinect 2.0 to use USB 3.0 and 12V power instead of the proprietary ($50) Microsoft connector