JOHN W HODSON

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EXPERIENCE

Microsoft, Redmond, WA

May 2019 to August 2019

Software Engineer Intern

- Developed using C# and .NET on <u>Azure Active Directory</u>, a cloud-based service responsible for managing user identities, access management, and devices.
- Solved a major customer complaint regarding the loss of private BitLocker key data by refactoring API calls and architecting an additional external storage model to decouple the lifetime of two data objects.
- Changed the intrinsic way that the Microsoft Mezzo cache service operated by altering their data syncing service to sync data objects with a one-to-many instead of a one-to-one relationship.

Ultimate Software, Weston, FL

May 2018 to August 2018

Software Engineer Intern

- Developed and tested using C# and ASP.NET on <u>UTE (UltiPro Tax Engine)</u>, an internal tax filing service responsible for the collection of over 13,000 tax codes.
- Implemented Grafana dashboard to diagnose performance issues with generation and calculation of tax forms in order to better serve users.

EDUCATION

University of Florida, Gainesville, FL GPA: 3.96/4.0

August 2016 to May 2020

Bachelor of Science in Computer Engineering

- Coursework Algorithm Design, Object Oriented Programming, Computer System Design, Operating Systems, Microprocessor Applications II (RTOS), Programming Language Concepts, Database Systems
- Honors Computer E Award (most prestigious academic award granted by ECE department), Anderson Scholar (top 1% academically, class of 2020), College of Engineering Scholarship for Engineering Leadership, CISE Scholarship, ECE Scholarship (x2), College of Engineering Dean's List (x4)

PROJECTS

C-Like Language to LLVM Compiler, Gainesville, FL

April 2019 to May 2019

- <u>Built a compiler</u> in OCaml for GNU bc, the popular Unix calculator language, using the LR(1) parser generator Menhir and OCaml's LLVM library to generate LLVM IR code.
- Includes functions, if/else statements, and while/for loops all structured in an abstract syntax tree.

TECHNICAL SKILLS AND INTERESTS

Architecture & Systems Web Development, RESTful APIs, Microservices, Embedded Systems

Languages C#, Python, Java, C, Assembly (AVR, ARM), OCaml, C++

Frameworks & Tools .NET, Django, Hugo, PyTorch, Bash, Git

Data Management Microsoft SQL Server, MongoDB

Containers & Cloud Docker, Azure