

JOHN W HODSON

✉ hodsonus@gmail.com

🏠 <https://www.hodsonus.com>

📞 hodsonus

☎ (727) 348-2899

EXPERIENCE

Microsoft, Redmond, WA

May 2019 to August 2019

Software Engineer Intern

- Developed in the C# and .NET environment on Azure's Active Directory, 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 storage service operates by altering their data synchronization 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 in C# within the ASP.NET framework in a Kanban-Agile environment on UTE (UltiPro Tax Engine), 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, Programming Language Concepts, Object Oriented Programming, Data Structures & Algorithms, Computer System Design, Database Systems
- Honors - CISE Scholarship, ECE Scholarship (x2), College of Engineering Scholarship for Engineering Leadership, College of Engineering Dean's List (x4), Anderson Scholar (top 1% academically, class of 2020), Computer E Award (most prestigious award granted by ECE department)

VOLUNTEER EXPERIENCE

Google igniteCS, Gainesville, FL

January 2017 to May 2018

Program Lead (formerly Logistics Director)

- Communicated directly with Google and make key decisions on critical aspects of the program.
- Managed scheduling between Oak View Middle School and our Google igniteCS team of over 30 mentors.
- Aided students in a class of ~20 working with VEX iQ Robotics, providing guidance in basic programming principles and hardware implementation as a mentor.

Association of Computer Engineers (ACE), Gainesville, FL

January 2018 to January 2019

External Outreach Chair

- Planned and implemented biweekly outreach events for a club with a reach of nearly 1000 members.
- One of 11 leaders responsible for the management/growth of ACE via decision making on key issues.

PROJECTS

C-Like Language to LLVM Compiler Gainesville, FL

April 2019 to May 2019

- Built a compiler 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

Back-End Lang.

C#, Java, Python, SQL, C++

Miscellaneous Lang.

OCaml, ANTLR, MATLAB, C, VHDL, Assembly (AVR, MIPS, ARM)

Tools & Frameworks

Git, .NET, Django

Interests

Spearfishing, Physical Fitness, Compilers