

JOHN W HODSON

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EDUCATION

University of Florida, Gainesville, FL **GPA: 3.95/4.0** **August 2016 to May 2020**

- Bachelor of Science in Computer Engineering
- Coursework - Algorithm Design, Programming Language Concepts, Object Oriented Programming, Data Structures & Algorithms, Microprocessor Applications, Digital Design, Engineering Project Management
- Honors - UF CISE Memolo Memorial Scholarship, UF ECE Ralph Sias Scholarship, Bright Futures Florida Academic Scholar (100% tuition coverage), College of Engineering Dean's List (Spring 2018, Spring 2019), UF Anderson Scholar (top 1% academically in class of 2020)

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.

Ultimate Software, Weston, FL **May 2018 to August 2018**

Software Engineer - TechStar 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 and payment of over 30 billion dollars in taxes.
- Managed and manipulated UTE's T-SQL database with the use of Microsoft SQL Server.
- Implemented Grafana dashboard to diagnose performance issues with generation and calculation of tax forms in order to better meet SLAs.

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.
- Participant in career development mentorship pairing program as an active member.

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/Octave, C, VHDL, AVR Assembly

Frameworks & Tools

Git, .NET

Certifications

Machine Learning (Andrew Ng on Coursera), MongoDB Basics

Interests

Spearfishing, Physical Fitness, Compilers, Machine Learning/Data Science