

Carson W. Boden

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EDUCATION

University of Michigan, Ann Arbor — *Master's in Computer Science*

JANUARY 2019 - DECEMBER 2019 / GPA - 3.97 / 4.0

University of Michigan, Ann Arbor — *Bach. in Computer Engineering*

SEPTEMBER 2015 - DECEMBER 2018 / GPA - 3.80 / 4.0 / Summa Cum Laude

EECS 281	Data Structs. / Algos. (A)	EECS 470	Computer Architecture (A)
EECS 370	Computer Organization (A)	EECS 482	Operating Systems (A+)

EXPERIENCE

Ocient, Chicago, IL — *Software Engineering Intern*

MAY 2019 - AUGUST 2019 / Return Offer Received

Contributed to the development of an exabyte-scale distributed database. Designed testing framework to inject errors into system calls made by the database to simulate failed hardware and improve fault tolerance. Coupled testing output with JIRA tracking to enable teams to quickly determine how their tests are performing on nightly builds. Optimized the database's distributed consensus protocol.

Qualcomm, San Diego, CA — *DDR/CPU Test Framework Enhancement SDE*

MAY 2018 - AUGUST 2018 / Return Offer Received

Designed testing infrastructure for debugging DDR systems. Developed automation framework for analyzing binary dumps from Android devices to speed up debugging process. Tools will be sent to third-parties for use, including Samsung.

Amazon, Seattle, WA — *Digital Content and Commerce Platform SDE*

JUNE 2017 - SEPTEMBER 2017 / Return Offer Received

Designed, developed, and tested tier-1 storage services and solutions. Created an onboarding UI for a shadowtesting framework allowing users to utilize the services faster and optimized settings for internal use.

CCC Information Services, Cerritos, CA — *Software Engineering Intern*

MAY 2016 - AUGUST 2016 / Return Offer Received

Developed parallel check-in kiosk applications for both Windows and iOS using C# and Swift. Windows application design process added features, eventually reaching MVP. Development for iOS was primarily prototypical and was handed off upon departure.

ACADEMIC PROJECTS & EXTRACURRICULARS

University of Michigan, Ann Arbor, MI — *Instr. Aide, GSI, Lecturer*

JANUARY 2018 - PRESENT

Helped manage the staff of 13+ aides and taught a class of around 600 students. Personally introduced new content to the course such as a revamped autograder, updated admin documents for students, and revised lecture and discussion slides.

EECS 470 Major Design, Ann Arbor, MI — *Computer Processor*

JANUARY 2018 - MAY 2018

Prototyped and programmed a superscalar, out-of-order processor which used hardware prefetching, advanced branch prediction, and cache enhancements such as non-blocking accesses and a victim cache. Time-intensive, two month experience for five team members, spent designing, testing, and documenting entire process.

ACHIEVEMENTS

James B Angell

Scholar

Dean's List

University Honors

PROGRAMMING LANGUAGES

Proficient: ARMv8, C, C#, C++, Java, Python, SystemVerilog

Experienced: CSS, HTML, Rust, Swift, XAML

Familiarized:

Angular, Go, JavaScript, JQuery, Ruby, SQL

DEVELOPMENT SOFTWARE

Proficient: Arch, Atom, Eclipse, Git, Libero, Monogame, SDL, Ubuntu, Vim, Visual Studio

Experienced:

Android Studio, Linux, Photoshop, Quartus, Xcode

PERSONAL PROJECTS

Arduino Door Lock
MonoAsteroids
Raspberry Pi Magic Mirror