

Carson W. Boden

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EDUCATION

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

SEPTEMBER 2015 - DECEMBER 2019 / GPA - **3.79 / 4.0** / MAJOR GPA - **3.91 / 4.0**

EECS 281	-	Data Structures and Algorithms	-	A
EECS 370	-	Computer Organization	-	A
EECS 373	-	Embedded System Design	-	A-
EECS 470	-	Computer Architecture	-	A

EXPERIENCE

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

MAY 2018 - AUGUST 2018

Internship centered around testing and 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 — *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 optimizing settings for internal use.

CCC Information Services, Cerritos — *Software Engineer*

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.

PROJECTS & EXTRACURRICULARS

EECS 470 Major Design Experience, Ann Arbor — *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.

Eta Kappa Nu, Beta Epsilon Chapter, Ann Arbor — *Pres., Treas., Corp. Rel.*

JANUARY 2017 - PRESENT

As treasurer: personally managed finances for HKN, the EECS honor society between corporations, events, and activities. As corporate relations: scheduled talks to the organization and University of Michigan's student body. As president: oversaw the chapter, set goals for the semester, and served as the external face of the organization.

EECS 373 Final Project, Ann Arbor — *Smart Shower*

SEPTEMBER 2017 - DECEMBER 2017

Prototyped a fully automated shower that included features such as water preheating, shower scheduling, and water stream aiming. Interfaced with solenoids, keypads, serial displays, and servos to create a functional product in approximately 5 weeks.

International Programs in Engineering, Berlin — *Robot Programming*

APRIL 2017 - JUNE 2017

Designed manual and automatic controls for warehouse robots. Created simulations in MATLAB to optimize PD controls, creating fastest path-following robot in the class.

ACHIEVEMENTS

James B Angell

Scholar

Dean's List

University Honors

AP Scholar with

Honors

National Honor

Society

PROGRAMMING LANGUAGES

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

Experienced: CSS,
HTML, Swift, XAML

Familiarized:
Angular, JavaScript,
jQuery, Ruby, SQL

DEVELOPMENT SOFTWARE

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

Experienced:
Android Studio,
Linux, Photoshop,
Quartus, Xcode

HARDWARE SKILLS

Experienced:
Breadboarding,
Circuit Design,
Soldering