

Carson W. Boden

Ann Arbor, MI 48104
(310) 977-6036
cwboden@umich.edu
carsonboden.me

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 / **Return Offer Received**

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