Benjamin Willey

Dallas, TX • (469) 600-4725 • ben@wwilley.com • benjwilley.github.io

OBJECTIVE Seeking an internship for Summer 2023

EDUCATION Texas A&M University (TAMU), College Station, Texas

Bachelor of Science in Computer Engineering, May 2024

Major GPR: 3.857, Cumulative GPR: 3.850

Pursuing minor in Math

RELEVANT COURSEWORK **CSCE 221**, Data Structures/Algorithms **ECEN 350**, Computer Architecture

CSCE 313, Intro to Computer Systems ECEN 469, Advanced Computer Architecture

ECEN 214, Circuit Theory **ECEN 248**, Digital System Design

CSCE 222, Discrete Math **CSCE 120**, Program Design and Concepts

TECHNICAL SKILLS

Software C++ Threading Algorithms Data Structures Python

Hardware Verilog Computer Architecture Circuits ARM ISA Digital Logic Design

PROJECTS ARMv8 Processor

ECEN 469, Summer 2022

- I designed a single cycle ARM processor in Verilog. It ran 32 bit ARMv8 instructions from a DRAM Verilog module.
- Having two professors for my lab improved my Verilog and debugging skills.
- I learned GTK wave for verification and to debug complex Verilog projects.

Multithreaded Database Using TCP/IP

CSCE 313, Fall 2022

- This program sent files or data requests from a server to a client.
- I learned that networking is more configuring, than manually building packets.
- This improved my threading/mutex skills since there was a large critical section. I also had to make a buffer data structure to dispatch the requests to the threads correctly.

STUDY ABROAD

Swansea, Wales

Computer Architecture, ECEN 350 & 469, Summer 2022

- Exploring the UK was awesome, I saw lots of castles and beautiful beaches in Wales.
- I made friends with other computer engineers from my university.
- While in Cambridge, I toured and attended lectures at ARM headquarters.

LEADERSHIP

Vex Robotics Team, Highland Park High School

Team Captain

- I learned how to make my team members more autonomous. I found teaching them
 needed skills, then giving them an abstract task worked better than telling them exactly
 what to do.
- This taught me a lot about product design and documentation, as engineering notebooks were a big part in scoring the teams.

BSA, Troop 82

Eagle Scout, Fall 2019

- My project benefited Texas Rustlers, an animal rescue. I replaced a countertop, repainted two rooms, and installed hand sanitizer stations throughout the rescue.
- This was a different leadership experience since it dealt with leading my friends and family.

ACTIVITIES

Aggie Coding Club Phi Delta Theta