# **Diego Aguillon**

Austin, TX | (832) 265-2565 | diego.eaguillon@gmail.com | https://www.linkedin.com/in/diego-aguillon/

## **EDUCATION**

## The University of Texas at Austin

May 2027

Bachelor of Science in Computer Science, Minor in Business Foundations

Coursework: Data Structures, Computer Architecture, Operating Systems

GPA: 3.96

## **TECHNICAL SKILLS**

- **Programming:** Java (Proficient), C (Intermediate), C++ (Intermediate)
- **Systems:** Windows, Linux
- Architecture: ARM, x86
- Developer Tools: Eclipse IDE, Visual Studio Code, Git

#### PROJECTS

## **Virtual Operating System Kernel**

January 2025 - May 2025

- Built kernel for preemptive multi-threaded operating system in C++ and x86 assembly via QEMU emulator
- Implemented Ext2 file system capable of traversing directories and interpreting files and symbolic links
- Included virtual memory functionality to enable construction and maintenance of user processes

## **Instruction Pipeline Emulator**

November 2024 – December 2024

- Simulated five-stage processor pipeline in C and ARM64 assembly
- Implemented core functionality that fetches, decodes, and executes computer instructions
- Increased throughput and processor efficiency via implementation of instruction forwarding

## **WORK EXPERIENCE**

## **Data Structures Undergraduate Course Assistant**

August 2024 - Present

## The University of Texas at Austin, Austin, TX

- Direct weekly hour-long discussions with 20+ students regarding course content
- Offer live walkthroughs of data structures problems for 4 hours a week in office hours
- Provide instructional feedback on assignments for 5+ hours a week via discussion board and grading interface

## Computer Science Undergraduate Advising Office Associate

August 2024 - Present

- The University of Texas at Austin, Austin, TX
  - Field phone calls and assist walk-ins with computer science advising needs for 7 hours a week
  - Coordinate with undergraduate academic advisors to direct students to appropriate faculty and resources

## LEADERSHIP & PROFESSIONAL DEVELOPMENT

## **Career Prep Fellow**

January 2025 – Present

#### **Management Leadership for Tomorrow**

- Accepted into a selective 18-month professional development program for high-achieving diverse talent
- Complete business case studies and assignments to grow leadership and technical skills
- Attend conferences hosted by industry leaders such as Apple, Google, and Dell Technologies

## Officer / Member

January 2024 – Present

## Information and Systems Security Society, Austin, TX

- Develop and enforce yearly budget for all organization matters as officer of logistical operations
- Book on-campus locations and facilitate the ordering and delivery of concessions for weekly events
- Attend bi-weekly general meetings centered on cybersecurity education and awareness