

Ethan Menell

512-815-6242 | College Station, Texas | ethan-menell@tamu.edu | [linkedin.com](https://www.linkedin.com/in/ethanmenell/) | [github](https://github.com/ethanmenell) | [leetcode](https://leetcode.com/ethanmenell) | [stackoverflow](https://stackoverflow.com/users/1000000/ethanmenell) (900 rep)

EDUCATION

Texas A&M University

General Engineering going into Computer Science

College Station, TX

Aug. 2023 – Current

EXPERIENCE

A&M DARPA Project TRACTOR Proposal Team

Texas A&M University

Aug. 2024 – Current

College Station, TX

- Implemented programming language translation with LLMs
- Wrote technical documentation for complex theoretical ideas

A&M Computer Science Research Assistant

Texas A&M University

Dec. 2023 – Aug. 2024

College Station, TX

- Researching secure noise generated from user biometrics
- Creating programs to generate secure random numbers from biometrics hardware

A&M Coding Club Project Manager

Texas A&M University

Aug. 2023 – Aug. 2024

College Station, TX

- Leading a team of 16 engineers developing a programming language
- Guided development with Scrum methodology through weekly meetings

CyberPatriots Club Founder/Leader

Bowie High School

October 2019 – June 2023

Austin, TX

- Established Bowie's first CyberSecurity club and competition team
- Competed nationally, teaching two teams of new members
- Achieved the platinum (highest) tier of competition in the 2022-2023 season

PROJECTS

Raven | *Rust, Tokio, LLVM, Node.JS, Java, GitHub Actions, Docker*

June 2022 – Present

- Developed a high-level 30,000 line programming language in Rust using LLVM
- Wrote a VSCode language plugin in Node.JS and an IntelliJ language plugin in Java
- Implemented an advanced logic engine to emulate Rust's trait system
- Used async job-based compilation to achieve compilation times within 1 second for 1 million lines
- Implementing CI with Github Actions and Docker to test additional targets

Rust Exokernel | *Rust, x86_64 Assembly, OS Development*

October 2021 – June 2022

- Engineered an operating system kernel in Rust
- Implemented low-level OS concepts like memory paging and hardware interrupts
- Learned assembly, the internals of the BIOS, and 16-bit and 32-bit assembly

Empire-Mod | *C#, Harmony*

July 2020 – October 2021

- Managed a game mod for RimWorld used by over 80,000 people
- Added content and updated the mod across one large game update
- Lead a team of 3 developers and 5 QA testers
- Provided customer support to a discord of 6,500 people

TECHNICAL SKILLS

Languages: Java (Over 50,000 lines), Python, C++, C, SQL, MongoDB, JavaScript, HTML/CSS, Rust (Over 30,000 lines), C#, JavaScript, Gradle, Quantum Programming with Jupyter

Frameworks: Node.js, JUnit, Mockito, WordPress, Maven, Arduino

Developer Tools: Git, Docker, TravisCI, GitHub Actions, CodeCoverage, Unit Testing, Ubuntu/Debian, Bash

Libraries: pandas, NumPy, Matplotlib, SymPy, LLVM, ANTLR, Unity, ChatGPT, AWS S3, AWS DynamoDB

Classes: Calculus 1, Calculus 2, Linear Algebra, Python, C++, DSA