

# John Friess

Austin, TX • johnrfriess@gmail.com • (703) 593-3367 • johnfriess.com • github.com/johnfriess

## EDUCATION

### The University of Texas at Austin

May 2025

#### B.S. Computer Science (*Turing Scholars Honors Program*)

- Relevant Coursework: Data Structures, Computer Architecture, Operating Systems, Discrete Math, Computer Vision, Competitive Programming, Linear Algebra, Probability, Multivariable Calculus
- GPA: 3.74

## EXPERIENCE

### JPMorgan Chase & Co. | Plano, TX

June 2023 - Present

#### Software Engineer Intern

- Developed mobile application analyzing and benchmarking client wealth performance using Angular and MySQL/AWS
- Understood and updated legacy codebase for efficient integration within a larger application
- Created test cases to ensure code written responds appropriately in given environments using Jasmine & Karma
- Utilized Figma panels to illustrate and plan interface design for the application

### TuGo Events | Austin, TX

August 2022 - Present

#### Software Engineer

- Spearheaded the development of a mobile social media application featuring distinct users, posts, and communities with Apple Maps and Google Maps integration using React Native for frontend and Django REST Framework and AWS EC2/S3 for backend
- Determined how to model the data with associated API endpoints to have seamless frontend integration with the backend
- Used actively across 10+ college campuses with a 5-star rating on the App Store
- Facilitated discussions with front-end team to address client expectations and construct Figma wireframe with 100+ panels

### American Systems | Chantilly, VA

June 2022 - August 2022

#### Software Engineer Intern

- Developed a full stack web application to find similar documents based on text similarity with Python, Django, and jQuery
- Explored machine learning applications for text recognition with NumPy and Pandas libraries
- Performed data visualizations to facilitate decision-making and identify discrepancies using Excel and SQL
- Updated employee profile database of 1,500+ employee profiles and corrected mismatched entries

### Fairfax County Public Schools (FCPS) | Alexandria, VA

April 2022 - May 2022

#### Information Technology Intern

- Utilized web debugging proxies, web scrapers, and SSL web server tests to ensure new software abides by FCPS standards for security and privacy before implementation to 200,000+ students and faculty
- Conducted experiments on new hardware technologies to determine effectiveness in classroom learning
- Analyzed software performance under stress using scripts in LoadRunner
- Restructured components of the FCPS test network router to increase scalability

## PROJECTS

### Desearch

October 2022

- Led a team of three to create a decentralized search engine using Django, JavaScript, and HTML/CSS
- Programmed a web crawler from scratch that utilized custom indexing based on user recommendations in Python
- Developed smart contracts on the Solana and NEAR blockchains to store search information in Rust and Python
- Received the award for Best Consideration of Security and/or Privacy at HackTX 2022

### Tetris

November 2022

- Recreated the classic Tetris game in Java with randomized falling tetrominoes controlled by user keystrokes
- Designed TetrisBrain, a genetic algorithm-based AI to survive as many falling tetrominoes as possible, that is capable of scoring up to 100,000+ and consistently perform well given different board environments in Java
- Performed automated whitebox and blackbox testing in JUnit to verify implementation works as intended

### Fun Language Interpreter and Compiler

January 2023 - February 2023

- Developed a C-based interpreter for “fun,” a simple language with functions, loops, conditionals, and operations
- Constructed a compiler to generate equivalent x86 Assembly code for “fun” in C
- Implemented efficient algorithms for lexical analysis, syntax analysis, and code generation to optimize performance

## SKILLS

**Languages:** Java, Python, JavaScript/TypeScript, C++, C, HTML/CSS, SQL, Solidity, Rust, Verilog

**Tools/Frameworks:** React, React Native, Angular, Git, Django, jQuery, JUnit, Flask, Node.js, Amazon AWS