Cormac Taylor

Computer science student graduating a full year early with a 3.964 GPA and a strong foundation in software engineering, machine learning, and full-stack development. Experienced in leading small teams to deliver impactful projects. Seeking to join a driven engineering-focused team.

EDUCATION

Stevens Institute of Technology | *GPA: 3.964*

Hoboken, NJ

Computer Science, B.S.

September 2022 - May 2025

- Coursework: Algorithms, Data Structures, Deep Learning, Database Systems, Operating Systems, Compilers
- Awards & Honors: Upsilon Pi Epsilon Honor Society, Edwin A. Stevens Scholarship, Dean's List (all semesters)

WORK EXPERIENCE

Stevens Institute of Technology | *Algorithmic Complexity*

Hoboken, NJ

Course Assistant, CS 601

January 2025 - Current

• Teaching and grading 25+ PhD students on theory topics involving Turing machines, time complexity, and reductions.

JoStrong (jostrong.com) | *TypeScript, React, Node.js, & MongoDB*

Hoboken, NJ

Lead Developer

August 2024 - Current

- Led a team of 6 developers to simplify user experience and automate admin tasks for a local fitness coach.
- Building a full-stack portal using React and Node.js, including payment processing, scheduling, and document signing.
- Created and implemented an onboarding process to clarify client vision and set benchmarks defining team success.

TD Securities | *Java, Spring Boot, & JUnit*

New York, NY

Software Engineer Intern

June 2024 - August 2024

- Improved performance of trade surveillance systems by 6.5% by spearheading the transition to Java 17.
- Boosted system reliability and efficiency by 15% by automating enterprise processes in Spring Boot.
- Consolidated and simplified existing code handling daily trading volumes of commodities using Java and Spring Boot.

PROJECTS (see demo on cormac-taylor.com)

Portfolio Website (cormac-taylor.com) | *React, Node.js, Three.js, & CSS*

January 2025

• Created a responsive single-page portfolio using React, Three is, and CSS to showcase projects and skills.

Neural Network | Jupyter Notebooks & Python

December 2024

• Built a fully customizable neural network using ReLU activation and gradient descent for classification tasks, demonstrating proficiency in Python and machine learning algorithms. Achieved 99+% accuracy on tested dataset.

Full-Stack Web App | Javascript, Node.js, MongoDB, Handlebars, & CSS

December 2024

• Led a team of **4 developers** to build a community board game-sharing platform. Integrating authentication, game requests and returns, user and game reviews, a public chat, and public events registration using Node.js and MongoDB.

Chat App | Erlang

November 2024

- Engineered a real-time chat app in Erlang, a highly performant function language, implementing message-passing protocols and a scalable architecture design to synchronize client, chat room, GUI, and server processes.
- Implemented user commands, including joining/leaving chat rooms, username updates, and message handling.

Diabetes Classification | *Jupyter Notebooks & Python*

October 2024

• Built a logistic regression classifier for BMI and glucose levels using maximum likelihood estimation and batch gradient descent to learn optimal model parameters and visualize the classifier boundary.

CRUD API | Javascript, Node.js, Express, & MongoDB

October 2024

• Developed a RESTful API to manage sports teams and games and implemented extensive input validation and error handling, ensuring strict data integrity rules for all data types.

TECHNICAL SKILLS

Languages: Python, Javascript, TypeScript, Java, Groovy, C, C++, Erlang, OCaml

Databases: PostgreSQL, MongoDB

Libraries/Frameworks: Pandas, NumPy, React, Material UI, Node.js, Express, Three.js, Spring, JUnit

Tools: Git, SPIN, Maven, Jira, Confluence