

Thomas Mbrice

<https://github.com/ThomasMbrice>

Education

Stony Brook University, NY

Expected Graduation: May 2026

Bachelor of Science in Computer Science

Scholarships & Awards: Dean's List: Fall 2022, 2023 Presidential Merit Scholarship

Relevant Coursework: Data Structures, Advanced Algorithms, System Design, Linear Algebra, Probability & Statistics, Software Development

Skills & Certificates

Certificates: Stanford Machine Learning Specialization, IMB: Python for Data Science, AI & Development

Languages: Java, JavaScript/TypeScript, HTML/CSS, C, Python, Bash

Frameworks & Tools: Node.js, Tailwind CSS, React, Git, Jupyter, Appwrite, React, API/JSON, Next.js

Concepts: Machine Learning (Image Recognition), Front-End, Back-End, Cloud Computing, Web-Scrapping

Experience

Commonwealth Coop Bank - SWE Intern

Summer 2023

- o Collaborated with the CTO to develop a more scalable database system, improving data management and performance
- o Automated error codes for malfunctioning hardware to help isolate problems for efficient use of the IT team
- o Developed comprehensive **technical documentation** for **42** Python Scripts with improvements and scripting processes, ensuring clarity and ease of use for future reference

Stony Brook - Teaching Assistant

Fall 2024

- o Assisted in teaching the Data Structures course, focusing on key computer science concepts such as Data Structures and Big O notation in **Java**
- o Provided one-on-one support and tutoring to students, helping them understand complex topics and improve their programming skills for as many as **15 students** per week

Projects

CodeUp - Next.js 15, Django, React, TypeScript

- o Collaborated to create a dynamic platform designed specifically for beginner and first-year computer science students to solidify their coding skills and gain practical experience
- o Designed and integrated a **browser-based code editor** for practical coding exercises.
- o Created and provided a variety of test questions to enhance coding skills.
- o Successfully onboarded **100 users**, demonstrating the platform's effectiveness and appeal.

Spark - Next.js 15, MongoDB, React

- o Developed a streamlined AI developer tool with a team member, using **Next.js v15**, integrated with **MongoDB** for data management
- o Designed and implemented a React-based, user-friendly, front-end interface with DaisyUI, facilitating easy AI model deployment via npm packaging

Investofolio - Gemini API, Python, React, TypeScript

- o Collaborated with a team member to develop a React-based website focused on educating users about stocks, featuring interactive graphs and animations
- o Utilized **TypeScript** for front-end development and implemented web scraping functionalities with **Python** to enhance data collection and analysis capabilities

Finance Dashboard Clone - TypeScript, Appwrite, APIs

- o Developed a consumer banking platform using **TypeScript**, leveraging the **Schadcn** component library for UI design
- o Integrated an **Appwrite** backend and utilized **Plaid** and **Dwolla** APIs for realistic money transfer functionalities
- o Created and maintained technical documentation for architecture, **API** integrations, and platform functionalities to support development and future enhancements

Campus Involvement

Peer Mentor - Stony Brook University

- o Served as a peer mentor, guiding and overseeing the development of **3 freshman students**
- o Enriched mentees' experience through **weekly** networking opportunities and active participation in campus events
- o Fostered a supportive environment to enhance mentees' academic and personal growth during their transition to university life

CEAS Student Intern - Stony Brook University

- o Managed daily operations of the CEAS Undergraduate Student Office, ensuring adherence to policies and deadlines, streamlined student check-in, up to **25 students weekly**
- o Led **2** CEAS USO outreach initiatives and coordinated college-wide events to cultivate a dynamic campus community