**Oluwatobi Olajide**

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**EDUCATION**

**Morgan State University Baltimore, Maryland**

*B.S in Computer Science Expected Graduation, May 2027*

* **Related Coursework:** Computer Systems and Digital Logic, Data Structures and Algorithms

**SKILLS**

**Programming:** Python, C, C#, JavaScript, Typescript

**Libraries:** Express, React, Flask, Next.js, Django, Jquery, Node.js, Pandas

**Tools:** Mongo, Firebase, Git, Docker, Bash, Linux, AWS, Google Maps Platform, Pinecone, Nginx, Auth0

**Experience**

[Cosmos](https://cosmos-six.vercel.app) (Python, Flask, Expresss.js, Mongo, Typescript, Node.js, React)

*Full Stack Engineer September 2024*

* Built a scalable Python backend with Mongo Engine ORM for data modeling of messages, events, and notifications. Integrated Redis Queue to optimize background tasks, achieving an 80% speed increase and reducing event creation wait times.
* Engineered real-time communication with Websockets for instant messaging and live notifications, and optimized lookups with a Trie data structure and Redis caching for faster data access.
* Containerized the application using Docker, configured Nginx as a reverse and SSL proxy to enhance performance and security. The application has 20 active users, with about 10 events created daily.

**PROJECTS**

[**Project Space**](https://projectspace-brown.vercel.app)(Python, Flask, Mongo, Typescript, Next.js)

*Backend Engineer October 2024*

* Developed a web application for users to find and collaborate on projects, allowing sign-ups, interest additions, one-minute reel recommendations, and project pitch postings.
* Implemented a scalable backend using Flask and Mongo Engine ORM, with Redis caching frequently accessed data, improving system performance by 90%.
* Switched from Sentence Transformer to Open AI embeddings, reducing embedding creation time from 1 minute to under 1 millisecond, and integrated Pinecone for AI-powered searches on project data.
* Created Typescript types to avoid undefined values, Context API for user context management, and Websockets for real-time messaging.

[**Tic Tac Toe**](https://tic-tac-toe-brown-sigma.vercel.app/) (React, SCSS, JavaScript, Firebase)

*Full Stack Engineer* *June 2024*

* Developed a responsive website with React and SCSS, ensuring optimal performance and usability, with over 5 daily gameplays and 30 active users.
* Utilized Firebase snapshots to manage and simulate real-time interactions between users, supporting both multiplayer and single-player modes with AI opponents.

**AWARDS**

**Web Development Competition Baltimore, Maryland**

*Hosted by Google and Society for Advancement of Computer Science (SACS)**Dec 2023*

* Secured 1st place as part of a three-member team for an outstanding web application project (Teachable).

[**Google HBCU Hackathon**](https://www.linkedin.com/posts/oluwatobi-olajide_googlehbcuhackathon-innovation-networkingopportunity-activity-7168673264653824000-O_lJ) **D.C, Washington**

*Hosted by Google**March 2024*

* Achieved a top 6 placement as part of a four-member team for an outstanding application (Culture Connect).

**Morgan Hacks Baltimore, Maryland**

*Hosted by Morgan State University**April 2024*

* Achieved a top 6 placement as part of a four-member team for an outstanding application (Fast Track).