MICHAEL BAYOUK

STUDENT / HONORS GRADUATE michaelbayo.uk Website



michaelbayouk@gmail.com

in linkedin.com/in/michaelbayouk/

INVOLVEMENT

February 2022 - Present

Hackathons

Instructed teams of 4 members with one project earning a top 10% placement and resulting in an interview opportunity with a major tech firm

January 2023 - May 2024

Small Satellite Research Lab

Contributed to C++ software aiding in adjusting crucial elements of the cube satellite launch

August 2022 - May 2024

Teaching Assistant & Peer Tutor

Helped over 100 students with coursework and grading assignments.

RELEVANT SKILLS

Java ★★★★★ Flutter **** Firebase **** C/C++/C# **** Git **** Unix **** JavaScript **** React.js/Next.js ★★★★☆ Python ★★★★☆ SAP UI5 *** Unity ★★★☆☆ R Studio ★★★☆☆

MongoDB/SQL ★★★☆☆

EDUCATION

B.S. Computer Science, Minor in Mathematics

University of Georgia Athens, GA

August 2021 - May 2025

- Certificate in Applied Data Science
- Current GPA of 3.85/4.00
- Funded Entirely by the Zell Miller Scholarship

Relevant Coursework

- Data Structures: Learned fundamental data organization methods (trees, graphs, hash tables)
- Algorithms: Developed skills in algorithm design, optimization, and analysis
- Data Science: Foundational data science techniques using Python
- Computer Networks: Studied network architectures, protocols, and security
- Software Engineering: Gained experience in software development lifecycles, design patterns, and collaborative coding practices through team projects

WORK EXPERIENCE

United Launch Alliance, Information Technology Internship

June 2023 - August 2023

Denver, CO

- Led SAP/UI5 project, in which I presented project outcomes to 5+ key managers within the organization, communicating progress and results
- Utilized SAP, UI5, JavaScript, and Axure 9 to optimize workflow processes, resulting in a 40% reduction in processing times
- Took advantage of a structured Git workflow, managing over 30 pull requests and facilitating 20+ code reviews, leading to faster development cycles
- Collaborated with a team of 20+ members to develop and launch our rocket, leading the software portion of the project from concept to launch attempt
- Effectively managed multiple concurrent projects (2-4 at a time) with varying deadlines, ensuring timely completion and exceeding manager expectations

PROJECTS

PokédexApp in Flutter, Personal

August 2024

- Utilized GSON and JSON elements to extract and structure over 800 Pokémon data points from the PokéAPI
- Applied Object-Oriented Programming principles to reduce code redundancy by 30%, improving maintainability and scalability
- Integrated interactive features, including clickable Pokémon sprites for detailed views, type matchups, and evolution information, resulting in a 15% increase in user engagement
- Conducted over 100 hours of testing and debugging, identifying and resolving 65% of major issues before release
- Optimizations boosted app performance by 50%, significantly enhancing responsiveness and user satisfaction

Top-Down Puzzle-Based Game, Personal

May 2024

- Developed a sophisticated leveling and health system with over 10 unique player progression mechanics, leading to a 25% longer average playtime
- Leveraged superclasses for efficient code reuse, reducing overall code complexity by 35% and accelerating development time by 20%
- Designed and integrated 10+ interactive object mechanics that increased player engagement by 30% through immersive puzzle-solving challenges
- Accomplished increased user engagement as measured by player progression, by implementing evolving enemies the player advances, creating a challenging user experience
- Cross-platform compatibility, supporting 3+ devices, and improving accessibility for a broader audience

Service Platform Mobile App, Hackathon

February 2024

- Guided a team of 4 developers in the creation of an Android app for a University Hackathon, finishing in the top 10% of all projects submitted
- Launched a community-driven task assistance app that connected users in need with nearby helpers to accomplish a variety of task
- Implemented a secure authentication system using Google Firebase, securing the personal data of up to 2000+ users
- Oversaw DevOps practices, reducing development cycle times by 30% through streamlined workflows and integration processes