

Abdalla Abdelmagid

Baltimore, MD — abdallaa2024@gmail.com — abdalla2024.github.io — (443) 640-8169

EDUCATION

Towson University, Towson, MD
GPA: 3.8/4.0

B.S. Computer Science — May 2025

- **Key Coursework:** Data Structures & Algorithms, Operating Systems, Database Management Systems, Mobile App Development, Software Quality Assurance & Testing, Object-Oriented Programming, Web-Based Programming, Programming Languages, Software Engineering

TECHNICAL SKILLS

Languages: Java, Python, C++, JavaScript/TypeScript, Swift, SQL, HTML/CSS, LaTeX

Frameworks/Tools: React, Node.js, Express, MongoDB, Firebase, Tailwind CSS, JUnit, Git/GitHub, SVN, VS Code, Xcode, pandas, Tableau, Matplotlib

Leadership/Experience

iOS Developer
Self-Employed

Remote
Jan 2025 – Present

- Published and maintain over ten native iOS applications on the App Store, achieving over 2,000 downloads and an average 4.6 rating.
- Manage projects end to end in an Agile/Scrum environment with a partner, guiding each app from initial wireframing and UI design through development, QA testing, and App Store release.
- Build scalable, maintainable codebases using SwiftUI, UIKit, StoreKit, and MVVM architecture, leveraging Combine and async/await for reactive, high-performance features.

Computer Science Tutor
Towson University — College of Computing & Information Sciences

Towson, MD
Sep 2024 – May 2025

- Mentored 15+ students per semester in object-oriented programming and data structures, boosting average exam scores by 18%.
- Developed supplemental learning materials and led debugging workshops to accelerate learning and reduce course drop rates by 10%.

Data Science Research Fellow
National Science Foundation (NSF)

Baltimore, MD
Sep 2024 – Dec 2024

- Used Python (pandas) and SQL to clean, merge, and analyze Baltimore City crime and resource datasets, applying regression analysis and simple clustering to uncover relationships.
- Built interactive dashboards with Tableau and Matplotlib to highlight trends, then presented actionable insights and recommendations to NSF and university stakeholders.

PROJECTS

University Marketplace

Feb 2025

- Built secure campus marketplace (MERN, Firebase Auth) enabling verified .edu sign-ups, real-time chat, and Stripe-powered payments.
- Designed flexible MongoDB schemas and optimized queries to ensure smooth loading and filtering of marketplace items.

nVolve — Event Discovery App

Nov 2024

- Developed SwiftUI app displaying geolocated events; used Alamofire + Codable for REST API consumption and CoreLocation for GPS services.
- Implemented a MapKit-based interface with filtering and favorites features to help users find and bookmark nearby events.

Movie Recommender Web App

May 2024

- Collaborated in an Agile team of 4 to design a responsive UI (HTML/CSS/JS) and build a RESTful backend (Java, Spring) interfacing with MySQL and OpenAI GPT-3 to suggest films.
- Implemented JWT-based authentication and deployed the application in a Dockerized environment for public access.