

## EDUCATION

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- **University of Maryland** College Park, MD  
*Bachelor of Computer Science* *August 2021 - December 2024*  
*Courses: Data Structures, Algorithms, Discrete Structures, Computer Systems, Organization of Programming Languages, Object-Oriented Programming, Mobile Application Development: Android Studio, Linear Algebra, Data Science, Compilers*  
*Programs: QUEST Honors Program, First Year Innovation and Research Experience (FIRE)*

## SKILLS SUMMARY

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- **Languages:** Java, Python, C, Racket, OCaml, Ruby, Rust, JavaScript, Assembly, SQL, Unix/Linux, R, DAX
- **Frameworks:** Git, Vim, Emacs, JSON, Scikit, NumPy, Pandas, Cron, Jenkins, Agile
- **Tools:** AWS, Power BI, Android Studio, Matlab, VSCode, XCode, R Studio, GitHub, Postman, Insomnia, Draw.io
- **Soft Skills:** Leadership, Event Management, Public Speaking, Communication, Time Management, Scheduling

## EXPERIENCE

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- **Fidelity Investments** Durham, NC — Jersey City, NJ  
*Full Stack Software Engineer Intern* *June-August 2022 — June-August 2023*
  - Optimized the Summary Allocation page's financial efficiency by achieving a 60% cost reduction. This was accomplished through advanced cron configuration, meticulous code versioning via GitHub, and streamlined deployment using Jenkins Pipeline.
  - Architected and deployed AWS DevOps Guru to harness machine learning-driven insights, revolutionizing the detection and resolution of data anomalies in the corporate action events sector.
  - Seamlessly integrated Datadog API and Plan Funds API into 3 Power BI reports, leveraging advanced DAX techniques within the power query editor.
  - Engineered sophisticated data transformations to showcase Fund Assets, resulting in 5 dynamic visualizations constructed using SQL and DAX expertise.
  - Rectified 8 legacy issues from the prior LEAP team, implementing precise calculations to enhance data clarity, optimizing readability for the Scrum Master.
  - Conceptualized and designed 3 innovative reports by extracting data from Plan Funds API's JSON structures, utilizing Python for data interpretation. These reports ingeniously processed user-input plan numbers to dynamically present associated funds in a tabulated layout.
- **QUEST Honors** College Park, MD  
*Student Consultant* *August 2022 - Present*
  - Conducted in-depth interviews, assessed secondary data sources, and extracted insights from qualitative research to identify transformative technological solutions aimed at elevating **SEE's (Student Entertainment Events)** operational efficiencies.
  - Advocated for the introduction of a smartphone application tailored for students and event attendees. This platform would serve as an integrated hub for all event-specific details, streamlining user experience and ensuring timely information dissemination.
  - Spearheaded strategic consultation for the startup company, **Airfare Snacks**.
  - Leveraged advanced machine learning frameworks in Python to dissect intricate trends spanning Shopify, Meta Business Suite, and Google Analytics platforms.
  - Delivered sophisticated, data-centric advisories tailored to bolster Airfare's business trajectory.
  - Expertly harnessed Python's analytical prowess to unearth nuanced correlations between social media advertising campaigns and customer purchasing behaviors.
  - Enhanced dining hall experience by conducting thoughtful surveys with staff and students, gathering feedback on the ease of food disposal practices.

## PERSONAL PROJECTS

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- **Facial Emotion Detection:** Developed an advanced facial emotion recognition system using Python's machine learning libraries, focusing on facial landmark analysis, Euclidean distance metrics, convolutional neural networks, and linear regression techniques. Employed natural language processing (NLP) on training datasets of facial expressions, ensuring precise identification of emotions such as happiness, sadness, anger, surprise, and neutrality upon software interaction.
- **Video Game Finder Mobile Application:** Crafted a sophisticated Android application using Java, enabling users to specify a game genre and subsequently receive a curated list of titles within that category, complemented by detailed insights on each game. Seamlessly integrated the RAWG Video Game Database API, ensuring dynamic data retrieval and optimal on-screen presentation. Presented detailed video game data complemented by pertinent visual imagery within the application interface.
- **Three-Dimensional Maze:** Leveraged Java's JPanel and sophisticated parallelogram techniques to engineer an immersive first-person 3-D maze experience. Integrated KeyListener functionality, facilitating intuitive user navigation and character control within the maze.