Jack Sebastian

jacksebastian1@gmail.com / (972) 310-5393

jacksebastian.com

linkedin.com/in/jacksebastian

Education

Texas A&M University / College Station, TX   Aug 2019 – May 2023

B.Sc. Computer Science and Applied Mathematics / GPA: 3.83

Awards/Distinctions: Honors Fellow, University Research Scholar, Engineering Honors, Honors in Mathematics, Latin Honors

Relevant Coursework: Data Structures and Algorithms, Computer Organization, Machine Learning, Introduction to Computer Systems, Computer and Network Security, Analysis of Algorithms, Parallel Computing, Cloud Computing, Human-Computer Interaction

---

Programming Languages and Skills

Java, Python, C++, JavaScript, HTML, CSS, React.js, Node.js, Express.js, Flask, MongoDB, SQL, Amazon Web Services (AWS)

Experience

Amazon / Software Development Engineer Intern / Austin, TX   May 2022 – August 2022

- Implemented a full-stack, self-service application for the D2AS team that streamlined device onboarding operations and improved efficiency for Amazon's Product Managers.
- Developed a robust system integrating multiple existing services, handling user authentication, and maintaining data integrity.
- Navigated both frontend and backend development, enhancing user experience and reducing time spent onboarding new devices by PMs.
- Utilized Java, React.js, Node.js, AWS ECS.

Projects   *Visit github.com/jacksebastian17 for more projects*

Illicit Transaction Graph Attention Network / github.com/jacksebastian17/graph-attention-network

- Developed a Graph Attention Network (GAT) for detection and classification of illicit transactions on the Bitcoin blockchain, demonstrating superior performance in comparison to traditional binary classification methods.
- Employed machine learning techniques to enhance Anti-Money Laundering (AML) methods, effectively identifying patterns in licit and illicit blockchain nodes.
- Utilized Python, TensorFlow, Keras, NumPy, pandas, scikit-learn.

Sports Betting Program / github.com/jacksebastian17/betting-algo

- Developed a positive expected value (EV) sports betting tool that uses web scraping to obtain odds from sportsbooks and calculates "edges" over the market to make a profit.
- Utilized Python, Selenium, pandas.

Harmonia / github.com/tamu-datathon-org/harmonia

- Developed authentication tool for TAMU Datathon's website that integrates with Discord to enable user account linking, role assignments, and membership status tracking.
- Implemented various server-side operations like user creation and update, fetching member status and roles, and retrieving specific user data based on authentication ID.
- Utilized Next.js, React.js, Discord.js, Express.js, MongoDB.

Organizations

TAMU Datathon / Vice President / College Station, TX   March 2021 – January 2023

- Led a team of 25 students in planning and executing an annual international data science hackathon, attracting 1000+ participants.
- Handled crucial responsibilities such as company sponsor liaison, venue selection, catering arrangements, and task timeline management.

Google Developer Student Club / President / College Station, TX   June 2021 – May 2022

- Directed the GDSC chapter at Texas A&M, facilitating weekly-career building and technical events to promote Google technologies.
- Managed a team of 5, fostered collaboration with other campus computer science organizations, and coordinated Google guest speaker sessions.