Jace Li

EDUCATION

Columbia University

BA in Computer Science, BA in Neuroscience and Behavior GPA: 3.77/4.00 Honors: Dean's List

PROFESSIONAL EXPERIENCE

Software Engineering Intern, Full-Stack

Ad Astra Information Systems

- Placed in agile team to build and deliver new SaaS product from the ground up using event-driven, microservice-based, serverless architecture using AWS (Lambda, DynamoDB, CloudWatch)
- Addressed production bugs and implemented performance improvements using Jira Kanban for triage and prioritization, utilizing
 CI/CD pipelines for rapid iteration and low lead time
- Implemented new microservices, accessed via REST API, to allow users to access and manage their data via web app
- Developed new features on React front-end, including Unit Tests with Jest, using new and existing API endpoints
- Eliminated 9-hour processing delay between DynamoDB and Snowflake, allowing for real-time updates of client data
- Created helpdesk widget, using JWT for authentication, iterating directly with stakeholders in Product team

Research Assistant, Computational Neuroscience

Columbia University, Zuckerman Institute

- Project Title: Action-Specific Dissecting of the Basal Ganglia: from the Classical Model to Diverse Action-Specific Subcircuits
- Researched structure and signaling of the basal ganglia, especially during the learning and performance of motor actions
- Implemented Machine-Learning (Support Vector Machine, Convolutional Neural Network) solutions in Python for video- and data-based behavior classification, calcium imaging analysis, and axonal brain mapping
- Built data analysis pipelines in MATLAB, used by 20-30 researchers. Identified and resolved algorithmic inefficiencies in previous methods, reducing total runtime per dataset from >30 minutes to <10 seconds
- Prepared publication-quality data visualizations, with co-authorship in 3 research papers

PERSONAL PROJECTS

ZeroNote <u>zeronote.net</u>

- Serverless note-taking web app
- Technologies: TypeScript, React, AWS (Lambda, DynamoDB, S3)

Evangel

- Single-player Roguelike Space Strategy/RTS game in active development
- Project initiator and leader for team of 3, leading weekly standups
- Responsible for game design and feature planning
- Technologies: C#, Unity

RELIC Community Web Tool project-wot-cyno.vercel.app

- Serverless web dashboard that queries the World of Tanks API for information on players in World of Tanks gaming community
- Hosted on Vercel for CI/CD
- Technologies: Typescript, React, Astro, Vercel

SKILLS

Programming Languages: TypeScript, JavaScript, Java, C#, Python, MATLAB
 Frameworks & Databases: React, Astro, AWS (Lambda, DynamoDB, S3, CloudWatch), Snowflake, JWT, Unity, MySQL, MongoDB
 Others: Machine Learning, Unit Testing, Git, Jira, Agile, Team Leadership, Project Management

ACTIVITIES AND INTERESTS

League of Legends Team Manager

Columbia Esports

- Coordinated tryouts for competitive teams
- Organized socials and team-building events for competitive teams

Bass Singer

Columbia University Collegium Musicum

(Anticipated) May 2025

May 2023 - Aug 2023

Full-Time: May 2022 – Aug 2022

20 Hours/Week: Sep 2021 - Present

09/2021 - Present

09/2021 - Present