JACOB YOU

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EDUCATION

Duke University

B.S. Computer Science, Statistics

- GPA: 3.96/4.0 (Dean's List with Distinction)
- Relevant Coursework: Data Structures and Algorithms, Calculus II with Application, Data Science, Computer Architecture, Regression Analysis
- Coursera College Certificates: Python 3 Programming, Databases with Python, Programming Foundations with JavaScript, HTML and CSS, Java Programming, Machine Learning, AI Fundamentals

PERSONAL PROJECTS

Dormant | Node.js, PostGreSQL, Swift, Alamofire

- Building a cross-platform marketplace app with Node.js, PostgreSQL, Swift, and Alamofire, enabling college students to buy/sell used items and reduce waste
- Integrated a cloud-based summer storage system, improving item management and reducing product waste by 19%
- Conducted 50+ user interviews and usability tests, increasing user adoption by 46% and transaction volume by 40%
- Led the implementation of a real-time notification system, improving user engagement and retention by 24%

WORK EXPERIENCE

HYC Technology Python	Fremont, CA
Software Engineering & Machine Learning Intern	June 2024 - Present
• Explored and analyzed potential opportunities to automate workflow processes for in-circuit testing on Apple and	
Tesla chips and circuits	
 Implementing Meta's Llama 3 Large Language Model using QLoRA fine-tuning on in-circuit testing to develop a specialized debugging assistant 	
• Reduced average production time by 28% through optimized testing processes and cross-functional collaboration	
Duke University Laber Labs Python	Durham, NC
Research Assistant	April 2024 – Present

- Conducting probabilistic Machine Learning research projects under Professor Eric Laber
- Developing and programming a multi-agent movement simulator using Python, pathfinding algorithms, and reinforcement learning AI to optimize task assignment and completion by multiple robots
- Utilizing Git for version control and project management, ensuring seamless collaboration and code integration

Healthy Acres | Python, MySQL

Software Engineer Intern

- Utilized Python to clean and analyze CSV data using APIs from Irrometer, VCWD, and SCE, effectively detecting patterns between temperature, humidity, moisture, and water cost
- Automated monthly reports and data visualizations, streamlining data analysis and reducing costs by 37%
- Collaborated with data and business teams to deploy predictive models, increasing forecasting accuracy by 25%

UC Santa Barbara Four Eyes Lab | Python

Research Assistant

- Led research project investigating the impact of annotator demographics on label noise in machine learning datasets
- Analyzed sentiment analysis ratings and the accuracy of multimodal machine learning algorithms
- Co-authored and published "Impact of Annotator Demographics on Sentiment Dataset Labeling"

LEADERSHIP

Duke Round Table (RT) Vice President

• Led and grew RT from 35 to 50+ members by mentoring underclassmen, leading workshops, and building community

SKILLS

• Technical Skills: Python, Java, Javascript, Node.js, HTML, C++, R, Swift, MySQL, PostgreSQL MIPS Assembly Language, Web Design, Machine Learning, Data Analysis, Microsoft Office, UI/UX Design

• Languages: English, Mandarin Chinese

Durham, NC Aug 2023 - May 2027

June 2024 – Present

Moorpark, CA June 2022 – Aug 2022

June 2021 - Aug 2023

Santa Barbara, CA

Mar 2024 – Present