# JACOB YOU

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## EDUCATION

**Duke University**                                                                                           Durham, NC
*B.S. Computer Science, Statistics*                                                           *Aug 2023 – May 2027*
- **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**                              *June 2024 – Present*
- 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**                                                                Moorpark, CA
*Software Engineer Intern*                                                                      *June 2022 – Aug 2022*
- 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**                                        Santa Barbara, CA
*Research Assistant*                                                                              *June 2021 – Aug 2023*
- 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**                                                *Mar 2024 – Present*
- 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