

Onsang Felicia Yau

ofyau17@gmail.com | 718-577-7558 | [LinkedIn](#) | [GitHub](#) | [DevPost](#) | Work Authorization: U.S. citizen

EDUCATION

University of Pennsylvania, Penn Engineering, Philadelphia, PA 08/2022 - **05/2024 (Expected)**
Master's of Computer and Information Technology (On-campus) GPA: 3.8/4.0

Dean's Master's Scholar | 2023 Grace Hopper Celebration Virtual Scholarship Recipient (by Penn WiCS)

Advocacy Chair @ Penn Lambda Grad | E-Board @ Chinese Queer Women Group | LGBTQ+ committee @ SEAS Wellness
Pride Summit'22 | Lesbian Who Tech Summit'22 | AnitaB.org Member'23-24

Cornell University, College of Agriculture and Life Science, Ithaca, NY 08/2018 - 05/2022
BS in Animal Science (Digital Agriculture) Major GPA: 3.9/4.0; Overall GPA: 3.7/4.0, Cum Laude

Morrison Award | Herman R. & Winnifred C. Schenkel Scholar | William C. Hooey Scholar | CALS Student Advisory Council

Relevant Coursework:

Software Development • Algorithm Design • Data Structure • Machine Learning • Algorithms and Computation • Operating System • Computer System Programming • Web Application Programming • Internet & Web System • Database Design • Data Science • Entrepreneurship for Engineers

TECHNICAL SKILLS

Programming Languages: Java • Python • C • JavaScript • C++ • R • SQL • Kotlin • x86 Assembly | **Full Stack Development:** Figma • REST API's • Git • Visual Studio Code • CSS • HTML • Bootstrap • Express • NodeJS • React • MongoDB • AWS S3 • Spark • CI/CD Pipeline | **Mobile App:** Android | **Data Analytic:** Stata • Jupyter • Pandas • NumPy • Matplotlib • Scikit-learn • SciPy • Stats-models | **Systems:** MacOS • Linux • Multithreading | **Product Management:** Agile • Cross-functional Leadership

SELECTED WORKING EXPERIENCE

Graduate Teaching Assistant, CIT5900: Programming Language & Techniques 08/2023 – **Present**

- Directed weekly recitation in Python and Java for 110 students, designing coding challenges and quizzes. Provided individual support during office hours, debugging 20+ projects and grading 30+ assignments weekly

Cloud, Network, and Digital Service Engineering Graduate Intern, the MITRE Corporation, Remote 05/2023 – 08/2023

- Engineered and led the presentation of a responsive web application using HTML5, CSS3, JavaScript, and AJAX on AWS, integrating a NoSQL database and RESTful API with Node.js and Express.js for real-time updates. Managed the full project lifecycle on GitHub, enhancing user interaction and ensuring scalability, while effectively communicating and building consensus with government stakeholders

Research Assistant IV & Lab Manager & Lab Consultant, Manfred Lindau Lab ([Published Abstract](#)) 01/2021 – 02/2023

- Analyzed electrophysiological data of chromaffin cells with advanced techniques for quantitative assessment under diverse conditions. Developed data management protocols for large datasets, ensuring integrity and accessibility

Software Quality Assurance Tester, eCornell, Ithaca, NY 03/2022 – 07/2022

- Enhanced eCornell's Machine Learning eLearning course by leading white-box testing, resolving 50+ issues, improving product quality by 15%, and implementing 10+ platform enhancements to boost student engagement

Software Engineering Intern (Python), Ithaca, NY ([Poster Link](#)) 06/2019 - 08/2019

Sustainable & Digital Animal Agriculture Research Internship | Kristan Reed Lab | Cornell University

- Orchestrated the development of a disease simulation model in Python for ketosis, mastitis, and milk fever in lactating cows, analyzing data to inform predictive analytics and enhance decision-making in farm system management

SELECTED INFORMATION TECHNOLOGY PROJECTS

Google Search Engine Clone Project 08/2023 – 01/2024

- Engineered an HTTP/HTTPS web server in Java, enabling dynamic content serving and session management, deployed on Amazon EC2. Developed an in-memory and persistent key-value store and an analytics engine in Java and created a distributed web crawler and indexer for a cloud-based search engine with PageRank algorithms

SocialGround Web App ([Project Link](#)) 09/2022 – 12/2022

- Led a 4-member team to develop a MERN stack social media application, focusing on UI/UX design (Figma, Bootstrap) and integrating 15 custom components. Established 8 REST API endpoints and a MongoDB database, utilized AWS S3 for media storage, and applied Agile and Git for project management, improving product quality by 20% via extensive testing (Cypress)

Bovine Sensor Data Analysis Project 02/2021 – 05/2021

- Collaborated in a 4-member team to create predictive models for cow survival and profitability, employing Python, Scikit-learn, and Stats-models across 374 features and 85,981 observations. Focused on data normalization and feature engineering, with Git for version control

SELECTED HACKATHONS

Carnation – 2024 Health Hackathon, Technical Product Manager & iOS App Designer ([Demo](#)) 03/2024

- Spearheaded the technical product management and design of Carnation, an AI-driven iOS app, at the 2024 Health Hackathon, innovating accessible healthcare solutions for the LGBTQIA+ community by integrating personalized matching algorithms and ensuring HIPAA compliance

Restz – 2024 FemmeHacks, Technical Product Manager & Full-stack Engineer ([Devpost Link](#)) 02/2024

- Led a team of four to develop "Restz", a one-click gender neutral bathroom finder and students' voice collection web app, awarded the "Most Innovative Hack" at the 2024 FemmeHack; demonstrated exceptional skills in innovative technology application, user-centered design, and agile development

MeCoo – 2023 FemmeHacks, Technical Product Manager & Front-end Developer ([Devpost Link](#)) 02/2023 – 11/2023

- Spearheaded a team of 4 to win the "Most Innovative Award" by developing a thermo-sensory bracelet for menopausal care, including coding the companion Android app in Java and XML using Android Studio

Menoasis – 2022 Health Hackathon, Technical Project Manager ([Project Pitch Link](#)) 02/2022

- Led a 6-person team to create a 15-minute Immersive Health recharge experience aimed at supporting menopausal women in the workplace

Farm eTech – 2021 Digital Agriculture Hackathon, Frontend Developer ([Project Pitch Link](#)) 03/2021

- Developed a web platform with an SNS messaging system to deliver agricultural insights to farmers, utilizing satellite data analysis (RGRI, NDVI, NDWI)

Nourish – 2021 Animal Health Hackathon, Product Development & Frontend Developer ([Project Pitch Link](#)) 02/2021

- Managed a 5-person team to design and pitch a service for real-time feline nutrition monitoring, combining software and hardware solutions for indoor cat care