linkedin.com/in/jonathanyuen66 • 732-810-9681 • jonathanyuen66@gmail.com

EDUCATION

University of Illinois at Urbana-Champaign B.S. Computer Engineering GPA: 3.67/4.00 **EXPERIENCE**

Ford Motor Company

Software Engineer Intern

- Automated the mainframe to Google Cloud Platform data migration pipeline by creating an event triggered cloud function that performs Dataproc Serverless batch conversion jobs via REST APIs, reducing manual conversion tasks by 80%
- Deployed cloud function as a Terraform template, allowing data infrastructure teams to expedite data migration time by 30%
- Collaborated with a team of 4 interns and chosen as a Top Achieving Idea out of 144 competing ideas to present to the board of Ford Leadership Sponsors about using selective recertification to make vehicles more circular and sustainable

Abbott

Data Science Intern

- Explored use of computer vision image classification CNN model to identify the sanitation condition of supply chain equipment, reducing manual inspections by 70%
- Delivered a mixed integer programming model to optimize the transshipment situation in the Indian supply chain network, identifying advantageous locations for warehouses and reducing transportation costs

BP

Data Analyst Intern

- Deployed a refinery database dashboard using Dataiku, SQL, and Python Plotly Dash to provide real-time insights and forecast potential refinery turnaround and outages, expediting decision making time by 15%
- Designed an interactive Power BI report for global refinery runs analysis, saving 10 weekly hours of manual reporting

Abbott

Data Analyst Intern

- Automated the energy report procedure by implementing 5 VBA Excel macros, saving 25 monthly hours of manual reporting •
- Identified opportunities to improve the operation and energy efficiency of building and process systems

PROJECTS

Cadence Playlist Creator and 2-D Computer Vision Gait Analysis

Python, OpenCV, NumPy, Django, JavaScript

- Examined biomechanical efficiency by locating and calculating angles of 7 mobility joints of a runner with Python script using OpenCV, identifying areas of dysfunction for injury prevention and mobility
- Developed webapp to curate music using user's cadence, music genres, and training goals using the Strava and Spotify APIs

SystemVerilog Super Mario Clone

SystemVerilog HDL, C

- Programmed a Super Mario Bros. clone, with animation, enemy interactions, and upgrades, using DE-10 Lite FPGA board
- Incorporated multiplayer functionality and user control by creating a USB keyboard interface using SPI protocols using C

LEADERSHIP & ACTIVITIES

Illini4000

2022 Information Director, 2020 and 2023 Rider

- Collaborated to design 75-day, 4,500 miles coast-to-coast cycling route for the Bike America team consisting of 20 students •
- Coordinated logistics for overnight accommodations, partnerships with the university and beneficiaries, and ride trainings
- Raised individually nearly \$4,000 for cancer research and patient support services .
- Developed marketing content to support and align the illini4000.org website with the organization's goals and strategies
- Improved website user experience on browser and mobile devices, increasing website traffic by over 263%

University of Illinois Civil and Environmental Engineering Department

Web Developer

- Migrated and maintained 2 University of Illinois Civil Engineering conference websites to publish.illinois.edu web hosting
- Designed optimized landing pages in HTML5 and CSS to support conference's marketing and promotional needs

SKILLS

Technical Skills: Python, Java, C++, C, PowerBI, SQL, HTML/CSS, SystemVerilog HDL, Google Cloud Platform, Terraform Coursework: Algorithms & Models of Computation, Analog Signal Processing, Artificial Intelligence, Computer Systems Engineering, Data Structures & Algorithms, Differential Equations, Digital Signal Processing, Digital Systems Laboratory, Discrete Structures, Applied Machine Learning, Probability, Thermal Physics, Quantum Physics, Deep Learning for Computer Vision, Principles of Safe Autonomy, Principles of Marketing, Management and Organizational Behavior Language Proficiency: English (Native/Bilingual), Mandarin (Native/Bilingual)

Aug 2021 - Dec 2021

Jan 2022 – May 2022

Chicago, IL

Champaign, IL

Champaign, IL

May 2022 - Aug 2022

February 2021 – May 2021

Oct 2019 - Present

June 2021 – Sept 2021

Urbana-Champaign, IL

Urbana-Champaign, IL

Champaign, IL



May 2022 – Aug 2022

Dearborn, MI

Aug 2019 - May 2023