

# Jonathan Yuen

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## EDUCATION

**University of Illinois at Urbana-Champaign** *B.S. Computer Engineering*

**Aug 2019 – May 2023**

**GPA:** 3.76

Urbana-Champaign, IL

**Relevant Courses:** Computer Systems & Structures, Data Structures & Algorithms, Digital Systems Laboratory, Machine Learning

## SKILLS

**Technical Skills:** Python, Java, C++, C, HTML, CSS, SystemVerilog HDL, Microsoft Office, Adobe Suite

**Language Proficiency:** Mandarin (Bilingual)

## EXPERIENCE

### BP

**Incoming**

*Incoming Data Analyst Intern*

Chicago, IL

- Create technical solutions using modern data analytics tools to inform decision making analysts and drive revenue generation
- Partner with analysts to develop highly visual dashboards and visualizations web technologies and third-party frameworks

### Abbott

**June 2021 – Present**

*Research Park Student Researcher Intern*

Champaign, IL

- Develop automated process for reporting energy usage at facilities
- Develop macros for excel spreadsheet

**University of Illinois Civil and Environmental Engineering Department**

**June 2021 – Present**

*Undergraduate Student Web Developer*

Champaign, IL

- Migrate and maintain the Illinois Transportation and Highway Engineering Conference and the Illinois Traffic Engineering and Safety Conference websites to the University of Illinois WordPress powered service
- Design and create optimized landing pages in HTML5 and CSS to support conference's marketing and promotional needs

### Commvault

**Sept 2018 – Feb 2019**

*Software Engineer Intern*

Tinton Falls, NJ

- Regulated sub client access to shared drive by developing an ObjectStore security infrastructure of 7 whitelist C# REST APIs
- Increased backup storage capacity by 20% through implementing de-duplication algorithms in Python

## PROJECTS

### FPGA Mario

**February 2021 – May 2021**

*SystemVerilog HDL, C*

Champaign, IL

- Developed a Super Mario Bros. clone, complete with animation, enemy interactions, and upgrades, using the DE-10 Lite FPGA board and SystemVerilog
- Incorporated multiplayer functionality by creating a USB keyboard interface using SPI protocols written in C

### OpenFlights Project

**February 2021 – May 2021**

*C++, GDB*

Champaign, IL

- Analyzed flights data including 8,000+ airports and 67,000+ routes by building a graph data structure using C++
- Collaborated with a team of 4 to write and test graph algorithms such as Dijkstra's Algorithm and PageRank Algorithm to search the network of airports and present paths between airports with routing options

### 2-D Computer Vision Gait Analysis

**Feb 2019 – June 2019**

*Python, OpenCV, NumPy*

Manalapan, NJ

- Modeled posture of a runner by locating and calculating angles of 7 mobility joints with Python script using OpenCV
- Recommended fitter running postures by examining biomechanical efficiency of a runner using Dr. Romanov's POSE method

## LEADERSHIP & ACTIVITIES

**Forage JPMorgan Chase Software Engineering Virtual Experience Program Participant**

**May 2020 – Aug 2020**

- Illustrated stock price trend for a trader's interface using React.js and Node.js as a basis for data visualization
- Signaled profitable trade opportunity for 2 correlated stocks by developing a Python algorithm to model buy-sell strategy

### Illini4000

**Oct 2019 - Present**

*2021 Information Director, 2020 Rider*

Urbana-Champaign, IL

- Selected to design and navigate 78-day, 5,000 miles coast-to-coast cycling route for the 2020 Bike Across America team
- 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