

Charlotte Yang

Braintree, MA 02184 • yangcharlotte2@gmail • 781-964-4991

[Github](#) • [LinkedIn](#) • [Website](#)

EDUCATION

University of Illinois Urbana-Champaign, Urbana-Champaign, IL

Expected: May, 2025

Major: Bachelor of Science, Computer Science

Cumulative GPA: 3.87/4.0

Relevant Coursework: Discrete Structures, Data Structures, Database Systems, Cloud Data Management, Algorithms, Computer Architecture, Artificial Intelligence, System Programming, Programming Languages and Compilers, Text Information Systems

Honors/Awards: Harmony Hacks 2.0 Honorable Mention, MIT Blueprint 3rd place, William Kendall Computer Science Award

Leadership: Women in Computer Science Web Team, Illinois CS SAIL Web Team

PROFESSIONAL EXPERIENCE

Okta, San Francisco, CA

May 2024 – August 2024

Software Engineer Intern

- Developed Golang CLI tool on AWS RDS from Java to reindex and sync 1M+ PostgreSQL users to MongoDB, validating users with REST API endpoint and using 86% less memory
- Deployed Python and Go user identification algorithms for merging SQL and Mongo query streams - allocating buffer memory for 2M+ users filtered by matching primary keys
- Mapped 500k+ Mongo BSON docs to Postgres schema by rewriting RxJava transformers to Go events publisher on Kafka server
- Applied Iterator design pattern for lazy data loading and multithreading of 2 concurrent streams, visualized on Datadog time series

Vanguard, Malvern, PA

May 2023 – August 2023

Software Engineer Intern

- Developed AWS Lambda batch job using Python to automate 500+ client transactional round-ups weekly, validating transactions with REST API endpoint and storing status log on DynamoDB
- Converted 250+ vendor reports into simplified text with NLP, visualized on Angular full-stack application with vendor searchability and filtering functionality

GE Appliances, Louisville, KY

May 2022 – August 2022

Digital Technology Intern

- Created Python file parser - comparing and filtering out 100+ applications in CMDB by Business Services affiliation and generating new sheet containing newly installed applications categorized by CI owners for multi factor authentication (MFA) report
- Developed Python script for RPA classification and assignment of 50+ applications utilizing MFA conditionals

MIT RAISE X SureStart, Cambridge, MA

July 2021 – August 2021

AI/ML Trainee

- Created sarcasm classifier employing feedforward neural network with RMSprop optimizer (71.6% accuracy)
- Developed gender classification CNN with dropout and batch normalization (86.2% accuracy)

PROJECTS

DARS Schedule Generator

March 2023 – May 2023

- Developed database schema and queried CRUD operations on multi-tabled SQL database holding user and schedule relational data
- Utilized React, Python, and constraint solver to generate custom future schedule given a user's DARS report and preference inputs

Wordle Solver and Player (C++)

June 2022 – August 2022

- Solver - Outputs best guess based on min worst case and min average number of guesses to solve for secret with 3500+ word pool
- Player - Validates user's guess is a real word before returning characters' color classifications at specific index

SKILLS & INTERESTS

Computer: Java, C, C++, Python, Go, AWS, SQL, DynamoDB, MongoDB, PostgreSQL, Angular, HTML, CSS, JS, Github, Firebase database, API, AI, Algorithms, TypeScript, Node.js, Scrum, Agile, Jira, BitBucket, Postman, OCaml, DataDog