John Wang

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Education

Harvard University | A.B in Computer Science and Neuroscience, M.S in Computer Science

May '24

Relevant Coursework: Systems Programming and Machine Organization, Introduction to Theoretical Computer Science, Data Structures and Algorithms, Computational Economics, Introduction to Machine Learning, Computational Learning Theory, Computational Neuroscience, High Performance Computing.

Experience

CCC Intelligent Solutions | DevOps Intern

Chicago, IL · Sep '21 – Dec '21

- Worked on a directed acyclic graph manager for AI Researchers that allowed for automated running of machine learning code.
- Implemented backend for task filters and updateable logic, enabling researchers to quickly filter through tasks and update them.

Amazon Web Services | Software Engineer Intern

Boston, MA · May '21 – Aug '21

- Architected and implemented end-to-end infrastructure for cloud-based testing, improving on pre-existing companywide internal testing framework that addressed the need for seamless automated deployment of services to AWS
 customers around the world.
- Wrote and debugged code that overhauled the antiquated artifact transform infrastructure present in deployment pipeline code, allowing new capabilities such as saving code to S3 for automated instances of AWS Lambda and AWS Fargate, giving engineers more flexibility in writing services for consumers.
- Developed and documented an API framework that extended the reach of the testing services to allow for developers to run tests on the cloud, rather than local machines, saving time and computing power for engineers.

Activities

Harvard Data Analytics Group | Case Team Lead

Cambridge, MA · Sep '20 – Present

- Lead data analytics and machine learning teams to consult firms across the globe with data driven insights.
- Implementing various classification algorithms (SVM, RF) using NLP methods such as Tf-Idf and BoW that classify certain objects into subcategories of domains, with tentative model accuracy of 85%.
- Created and tested a time-series model for predicting revenue for a company to allow executives to leverage real time data to make company-wide budget decisions.

Harvard SEAS CS51 & CS124 | Teaching Fellow

Cambridge, MA · Jan '21, Jan '22

- Teach Abstraction and Design in Code (CS51) and Data Structures and Algorithms (CS124) to Harvard College students.
- Responsibilities include leading sections, holding office hours, grading problem sets and exams.

Projects

$\textbf{Syllascrape} \mid [\texttt{Python} \cdot \texttt{Notion} \ \texttt{API} \cdot \texttt{React.js}, \texttt{Flask}]$

• Motivated by the unnecessarily large amount of time taken in organizing a learning environment on Notion, students can use this service to scrape their syllabi and create assignments/reminders in Notion automatically.

Flite | [Next.js · MongoDB · Socket.io]

• Motivated by the increasing need for more social learning opportunities amidst COVID-19, this full-stack chatting system allows students to "fly" to different trees that serve as learning communities. Service requires users to authenticate before using the chat.

InformaVirus | [Vue, is · Google Maps API · Firebase]

• An end-to-end service that tracks users locations and allows them to broadcast symptoms of COVID-19 if applicable, to which users that have been in contact with them in the same location would be notified.

MiniML | [OCaml]

• A metacircular interpreter for the OCaml programming language. Implemented with the following models: substitution, dynamically-scoped environment, lexically-scoped environment. Supports operations on all atomic types, as well as syntactic sugar.

Technical Skills

Programming Languages & Frameworks: Python · C++ · Java · OCaml · JavaScript · React.js · Node.js · Flask · AWS