Anson Huang

Computer Science Student

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Experience

USAFACTS | Software Engineering Intern

June 2022 – September 2022 | Bellevue, WA

- Developed a cloud-based, serverless ETL data platform called Galactus that involves data ingestion, extraction, normalization, exploration, and exportation using **Azure Functions**, **FastAPI**, and **Azure BLOB Storage**.
- Integrated **Azure Purview** with Galactus allowing internal users to oversee data.
- Designed **CI/CD** pipeline for Galactus that supports dev and prod versioning and eliminates the downtime between deployment and active status allowing users to seamlessly use the platform without disruption.
- Created a local testing suite using **Azurite** that allows contributors to test the ETL process on their local machine without affecting the prod data store.

USAFACTS | Software Engineering Intern

June 2021 – September 2021 | Bellevue, WA

- Implemented a Census data visualization tool allowing users to explore the U.S. population across a variety of filters such as race, ethnicity, sex, age, and year.
- **Data:** Utilized **Azure Data Factory**, **DataBricks**, **Snowflake**, and APIs to import over 40 billion data points of Census data into USAFact's data estate.
- **Backend:** Built upon internal APIs supporting large data fetching. Contributed to a metric engine allowing the frontend to quickly fetch data from the database.
- **Frontend:** Implemented several dynamic population visualizations in **React.js** (population pyramids, U.S. choropleth maps, bar/line charts) using **Darkhorse** and **Nivo** libraries.

UNIVERSITY OF WASHINGTON | CSE Teaching Assistant

September 2021 – Current | Seattle, WA

- **CSE 142: Computer Programming I [AU21]**
  - Introduced Java and basic programming concepts such as variables, expressions, loops, file processing, arrays, and inheritance to new Computer Science students through small class sections.
- **CSE 122/143: Computer Programming II [WI22, SP22, AU22]**
  - Taught students how to implement and be a client of data structures such as Lists, LinkedLists, Stacks, Queues, Trees, and Maps.
  - Introduced concepts such as polymorphism and recursion.
- **CSE 373: Datastructures and Algorithms [SU22]**
  - Introduced BSTs, AVL trees, heaps, graphs, MSTs, disjoint sets and their implementations.
  - Taught programming concepts such as BFS, DFS, Dijkstra's, runtime analysis, and dynamic programming.

Projects

VIBLIO (2022) | JavaScript, Webpack, CSS, HTML, React.js, Python, SQL

- Developed a **Google Chrome Extension** for a research project with the Social Futures Lab that embeds a citation tool under YouTube videos.
- Created an interactive timeline bar using **React.js** and the **react-chrono** library that tracks user clicks on a **Azure SQL Storage** backend.

Skills

PROGRAMMING

2+ years

Python • Java

1+ years

SQL • Shell • LaTeX • JavaScript • TypeScript • HTML • CSS

<1 year

C • C++ • Datalog

LIBRARIES/FRAMEWORKS

Pandas • FastAPI • React.js

TOOLS/PLATFORMS

Git • Azure Ecosystem • Snowflake • Databricks

Education

UNIVERSITY OF WASHINGTON

Bachelor's in Computer Science

Bachelor's in Political Science

September 2019 - March 2023 | Seattle, WA

GPA: 3.81 / 4.0

Coursework

Computer Programming I • Computer Programming II • Foundations Of Computing I • Foundations Of Computing II • Software Design & Implementation • Data Structures & Parallelism • Systems Programming • Data Visualization • Database Management • Database Internals • Algorithms • Artificial Intelligence • Computer Security • Datacenter Systems • Computer Ethics