### Simon Bui

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### PROFESSIONAL EXPERIENCE

## Data Analyst | Transaction Data Systems | Oct 2021 - Present

- Verified flat file data to ensure data integrity and compatibility with database procedures
- Utilized SQL to identify data related issues that resulted in bugs on clients' UI or services
- Recommended changes to SQL stored procedures to enhance existing data loading processes
- QA tested database procedure changes by analyzing data flow, API calls, and JSON payloads
- Modified XML configuration files to test and validate data transfer to and from 3rd party REST APIs
- Leveraged regular expressions to automate error handling of vaccination data transmission to state government agencies
- Acted as a technical liaison between client support, project managers, software engineers, and data engineers
- Aggregated data from Oracle and SQL Server databases for third parties and interdepartmental reporting

# Software Engineer (Practicum) | Commnet Wireless LLC | May 2022 - Aug 2022

- Created a front-end UI with Python and Flask that processes HTTP requests to pull and analyze cellular networking data
- Aggregated data based on user selections to dynamically render graphs and automate machine learning models that flag anomalous data as a signal for intervention
- Provided well-documented and unit tested code for the client to modify for future infrastructural changes

### Pharmacy Technician | Walmart | Nov 2016 - Jul 2020

- Analyzed prescription pick up trends to recommend operational changes addressing patient adherence rates, a critical KPI; recommendations led to an increase in patient adherence from 65% to 80.5% within 1.5 years (one of the largest improvements in the market)
- Queried and aggregated historical drug sales data over a 5 year window; visualized the aggregated sales trends to optimize automatic inventory replenishment systems resulting in savings of up to \$30k per month

#### **PROJECTS**

## Meeting Schedule Tracker (TypeScript, Node.js, Express, MongoDB, React)

- Built an application that allows users to schedule, reschedule, cancel, and view other users' meeting times
- Designed a backend REST API to store and handle user meeting data in a NoSQL database
- Used Axios to transfer JSON data between client and server to populate the calendar and agenda UI

### Online Game Damage Calculator - www.trixion-calculator.com (JavaScript, React)

- Developed a web application to compute the efficiency given a user's selected item combination, allowing players to make better informed purchasing decisions (potentially saving a player hundreds to thousands of dollars)
- Managed React states to provide dynamic results upon viewer interaction with the UI

### Interactive Pricing Tool for New York Hospitalization Costs (Python, GCP, d3.js)

- Extracted, transformed, and loaded a 2.34m row patient records data set into GCP for data analysis
- Developed a model that predicts hospitalization prices in New York
- Deployed a web app that renders an adjusting color map of New York counties with estimated expenses per hospital given user inputs; prospective patients can make selections on medical conditions, age, gender, etc.

#### **SKILLS**

**Programming & Technologies:** JavaScript, TypeScript, Node.js, Express, React.js, Python, Flask, SQL, HTML/CSS **Other:** Git, machine learning, Jira, Confluence, Salesforce, APIs, object-oriented programming

#### **EDUCATION**

# **Georgia Institute of Technology**

MS Analytics, 2020 - 2022

## University of California, Irvine

BS Pharmaceutical Sciences, 2012 - 2017