

# William Alvarez

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Mobile: (617) 894-2368

Location: Brookline, MA

**Experienced and driven data scientist seeking an opportunity to solve to large-scale problems with innovative data analysis techniques**

## EXPERIENCE

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### **Diameter Health/Availity** - Database Engineer

April 2022 - September 2023

- Focused on building internal software to pull, organize, enrich, and package enormous volumes of healthcare data from disparate clinical sources.
- Built a full back-end database and pipelines to transfer data from distributors to our internal application using Python and SQL.
- Created Data Visualization tools for healthcare professionals to review and edit changes to the database.
- Wrote internal developer tools to assist in managing large quantities of differently shaped data sources.

### **Mass Mutual** - Data Analyst

November 2021 - April 2022

- Modeled the Direct Private Investment team's data to analyze their investment portfolio, and key performance indicators.
- Automated data visualization tools to assist with decision making, revenue calculations and management reporting preparation.
- Improved data structure and efficiency of the team's data by utilizing Microsoft Excels more advanced features.

### **Intern at FJA** - Software Developer

June 2019 - August 2019

- Maintained a data-oriented insurance product model, benefit plan management, and underwriting software automation.
- Code analysis, unit testing and end-to-end testing major functionality of the software we delivered.
- Wrote and maintained documentation for vital projects with many contributors.

## PERSONAL PROJECTS

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### **TCG Data House**

- TCG Data House is a trading card game data base that I created from scratch using Python and SQL.
- Created full database architecture and data pipelines to keep cards organized and up to date.
- Full functionality to search for any card across all trading card games.

### **Mouse Free Accessibility Application**

- Mouse Free is an application that helps users who struggle with using a mouse by allowing users to mark frequently clicked areas of the screen as designated points of interest.
- Wrote application with Python using pyguiauto for mouse movement and used tkinter to create a display for users.
- Uses graph theory to determine the best navigation between points of interest.

You can visit my personal website here (<https://willaby292.github.io/WilliamAlvarez>) which hosts my finished projects.

## SKILLS

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Python • SQL • Excel • Java Script • R • Git • Tableau • Java • Node • Pandas • NumPy • REST API • OAuth • ChatGPT API  
Statistical Analysis • Data Visualization • Database Management • Database Architecture • Statistical Modeling • Data Mining

## EDUCATION AND ATHLETICS

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### **University of Massachusetts Amherst**

*Bachelor of Science in Informatics*

Amherst, MA

May, 2021

### **Captain of the University of Massachusetts Rowing Team**

September 2017 - June 2021

- As Captain I developed leadership skills in building an organized and efficient squad.
- Raced at Head of the Charles in Cambridge and national events.
- Dedicated 20+ hours a week to regimented training and team building while in school.