## Max S. Haberman

Framingham, MA, 01702 | 508-965-4049 | max@maxshaberman.com

# **SOFTWARE ENGINEER | FULL STACK ENGINEER**

Full-stack engineer with 3 years of professional programming experience and 9 years of customer service experience. Skilled in several programming and scripting languages, and accomplished in both front-end and back-end development, including cloud development. Quick, efficient, self-starter, friendly, always eager to contribute, and always looking for the next challenge.

#### **LINKS**

GitHub: Detailed resume: LinkedIn:

<u>github.com/TheOmnimax</u> <u>theomnimax.github.io</u> <u>linkedin.com/in/maxshaberman</u>

#### **SKILLS**

**Languages**: Dart, Python, JavaScript, HTML, CSS, Google Apps Script, JSON, PHP, Kotlin, Java, C++ **Frameworks and SDKs**: Flutter, Firebase Authentication, Firestore, FastAPI, Flask, WebSockets, Socket.io, Google Cloud Platform, Google App Engine, Google Datastore

**Apps and systems**: Git, Google Drive, ConnectWise Automate and Manage, Microsoft Active Directory, MS Word, Excel, PowerPoint

#### PROJECT EXPERIENCE

#### eReader

- Developed full-stack app, using Flutter (Dart) for frontend, and FastAPI Python server hosted on Google App Engine for backend, that allows users to download and read eBooks.
- Implemented BLoC for state management for client app.
- Google Cloud Datastore database to allow users to manage, organize, and retrieve ebooks.
- REST API requests (built in Python using Flask through FastAPI) for client to communicate with server.
- Authentication through Firebase to ensure only authorized users can download new ebooks.
- Created page divider algorithms to read and render ebooks. It worked by rendering a virtual version of the book, counting the number and height of lines, and using that to determine the point of division in the text.

## **Boggle**

- Developed full-stack app, using Flutter (Dart with BLoC) for frontend, and FastAPI Python server hosted on Google App Engine for backend, that allows users to play Boggle in real-time with friends online.
- Managed shared memory used by a multi-threaded server with coarse-grained locks, to store player and game data.
- Built a polling mechanism via REST API to handle multi-client synchronization on near real-time state updates player data, player word choices, and game state.
- Used graph data structures (i.e. a trie), and wrote path-finding algorithms to efficiently traverse through the Boggle words solution space and find all possible words, handle game events, and calculate game scores.

## Trivia game

- Developed full-stack app, using Flutter (Dart with BLoC) for frontend, and FastAPI server with Socket.io hosted on Google App Engine for backend that allowed users to play a real-time trivia game online.
- Google Cloud Datastore to store real-time game data. Designed data schemas to manage multiple relational entities that were optimized for high frequency writes.
- Multi-client real-time synchronization with the server managing shared state, maintaining client-server communication using WebSockets, allowing real-time communication.

(Work experience on next page)

### **WORK EXPERIENCE**

Dobility, Inc., Cambridge, MA **Senior Technical Associate** 

June 2019 - Present

Developed tools and resources to further enhance the capabilities of the software and our users.

- Developed 17 of the 40 total field plug-ins using frontend web development, and contributed to others, to enhance the capabilities of the software. Created custom solutions for the niche needs of NGOs, furthering the company's social mission, and adding new user segments.
- Developed and hosted 7 webinars and 10 training sessions. Designed curriculum to introduce and educate users on key product features, increasing user acquisition and user retention. Coordinated and executed internal workshops for coworkers, providing guidance on how to demonstrate the app to capture new users.
- Wrote scripts and recorded audio and video for 7 how-to videos, allowing new users to easily emulate processes for both basic and advanced functionality.
- Wrote 57 user guides, and created over 160 tutorials with example code. These facilitated user education on how to use the platform, and also decreased customer ticket times by providing supporting materials.
- Developed 23 Python scripts and packages for data retrieval, transformation, and analysis using REST APIs and other tools. Used for churn analysis, support time responses, and more, in order to show areas of improvement.
- Discovered and reported over 80 platform issues as part of the QA team, detailing steps to reproduce so the development team can resolve all issues before production release.
- Responded to user support requests submitted by users, completing about 8 tickets per day. Went above and beyond for users by responding within 1 hour, much faster than the 2-hour standard. Reviewed all tickets, and was point-of-contact for escalation.

# LANConnect Systems, Inc, Foxborough, MA Technician I

June 2017 - May 2019

Monitored and resolved general computer issues.

- Completed 10 client-created and 30 automated tickets per day, ensuring high rates of client satisfaction.
- Completed other projects as needed, such as evaluating new software for clients.

# Best Buy, Framingham, MA

June 2015 - January 2018

## Sony Experience Expert and Home Theater Sales Consultant

Sold home theater solutions.

- Generated increased sales by potential \$500 sales into \$2,000 sales, selling over \$1,000,000 of product and services in the first year.
- Earned "Achiever" Award for 2016, coming in second out of 300 in territory sales.