

# ISAAC SINGER

isaacsingerjobs@gmail.com

484-999-1566

Malvern, PA

## SUMMARY

---

Software Developer with a strong academic background in artificial intelligence, full stack development, and data analysis. Solid problem-solving abilities and adaptability in various professional roles. Entrepreneurial in nature, has successfully initiated and completed projects. Versatile and promising candidate prepared to contribute effectively to a technology-based role.

## SKILLS

---

### Programming skills:

C++, Python, Java, TypeScript, Kotlin, PHP, JavaScript, HTML, CSS, Agile, Scrum, Svelte, SvelteKit

### Tools:

AWS, Azure, GitHub, Mocha, Chai, Microsoft Suite, Eclipse, PyCharm

## EMPLOYMENT HISTORY

---

**Tildei** - WhatsApp Marketing Software - New York, NY | Remote - Software Engineer *December 2023 – present*

- Engineered a solution to full-text search and sort throughout the product suite, implemented across the frontend, backend, and database
- Developed support in the product for one of the three possible interactive message types in the WhatsApp API, a feature now used by every single Tildei client
- Increased usability and feature set of the editor component, an element that handles 87% of the customers actions

**Rx.Health/Commure** - Patient Messaging - New York, NY - Software Engineer *April 2023 – November 2023*

- Restructured company's entire database and backend from MongoDB to Databricks to increase system's speed
- Authored a converter in TypeScript for MongoDB queries to be transformed into Databricks queries, reducing cost of adopting the new system
- Managed other developers and led a team across 3 time zones, used Scrum cycle
- Conducted customer calls to onboard new clients

**Amazon AWS, Proton** Jersey City, NJ - Software Development Engineering Intern *May 2022 – August 2022*

- Gathered data on AWS Proton downtime and built an impact report tool
- Implemented an information processing tool using an API in Kotlin. Processed and stored 300 information logs a minute into a database
- Constructed a server to run the Grafana graphing API, wrote Lucene queries for the OpenSearch database, and graphed customer impact
- Designed the infrastructure to convert existent graphs from Cloud Watch into the Grafana API

**AGI** - Aerospace Software - Exton, PA - Software Engineering Intern *May 2019 – August 2019*

- Translated older software from VBScript to JavaScript across 22 web pages for new release of ODTK software
- Overhauled the design of 45 software panels to modern and intuitive standards
- Addressed the design requirements from three separate parties and presented an agreed upon solution

**EVOLVE IP** - Telecommunications Provider - Wayne, PA - Software Engineering Intern *May 2018 – August 2018*

- Authored a tool to update pricing model, saving \$10,000 a month
- Applied the Google Maps API to visualize geographical sales volume

## EDUCATION

---

**New York University**  
Tandon School of Engineering  
B.S. in Computer Science

*September 2018 - December 2022*

**Relevant Coursework:**

Artificial Intelligence, Computer Security, Linear Algebra, Design & Analysis of Algorithms, Data Analysis, Object Oriented Programming

## INTERESTS AND HOBBIES

---

**Interests**

- AI, Full Stack Development, Automation Engineering

**Hobbies**

- Fishing, Anything to do with coffee

## PROJECTS

---

**Internet Based Coffee and Espresso Cafe** - (JavaScript, PHP, HTML)

- Founded an online cafe that accepts orders, alerts barista of orders, and has an administrative back-end feature
- Sold 70 espresso drinks a month to individuals in my university dormitory through e-commerce website
- Ran social media account and managed Facebook Ads: produced 2-4 ads a month

**AI Based Clothing Reselling Analysis** - (Java, AWS)

- Launched analytics app for apparel resellers
- Incorporated K-Means and Neural Networks to garnish 35% profit per flip, beating industry standards
- Sold subscription to company's analytic software through custom built website

**AI Poker Playing Bot** - Neural Network Based Card Playing System (Java)

- Trained in a novel approach of using both an adversarial, and a LSTM algorithm to beat human poker players
- Won 23% more than the average human player in free online matches

**Web 3 Blockchain Platform** - (Java)

- Invented an architecture that could run WebApps written in any language on an integrated blockchain platform
- Developed platform in Java and ran it across multiple VMs to create a computer network
- Proved project ran at a 10X faster rate than competing systems, and it also had more features and compatibility
- Project involved self education on Sockets, TCP, Network Security, Data Encryption, and Blockchain Technology

## RESEARCH

---

**Deep Learning's Improvement on Spatial Detection** - (Python, Cuda, PyTorch)

- Tested a deep learning model, a lightweight machine learning model, and a deterministic analytic models on a data set with LIDAR ground truths
- Implemented many models, which involved running Deep Neural Networks on NYU's Super Computer
- Found that Deep Neural Networks are very good at Spatial Detection and worth their architectural complexity

## GITHUB

---

**My GitHub:**

[github.com/iwillseeyouinabits](https://github.com/iwillseeyouinabits)