# Avi Glozman
Backend Engineer

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## Skills

**Programming languages:** Node.js, Python, TypeScript
**Concepts:** REST APIs, WebSockets, Distributed Systems, Data Pipelines
**Software:** Git, Linux, SQL, NoSQL, Azure, AWS, LaTeX
**Spoken languages:** English (Native), Russian (Native), Spanish (Elementary), Hebrew (Elementary)

## Professional Experience

**Hooked**, Los Angeles, CA *(Remote)*

### Backend Engineer  *April 2021 → Now*
- Trained a YOLOv3 object detection model using Darknet for detecting parts of the human spinal anatomy with up to 98% accuracy
- Developed a pipeline for converting CT scan data (DICOM format) into a 3D model, then into 2000+ augmented images for use as a synthetic dataset for model training and testing

**Uber**, Pittsburgh, PA

### Software Engineering Intern, Advanced Technologies Group (ATG), Simulation  *May 2019 → Aug. 2019*
- Created an ETL system using Python for moving self-driving car related data from DynamoDB to PostgreSQL, and solved complex data-syncing challenges
- Developed pruning algorithms in Python for preventing transfer of broken, invalid, and/or redundant data relating to self-driving car testing
- Contributed significantly to a web API written in Go for self-driving car data analysis in production

**Aspace**, Seattle, WA

### Lead Software Engineer, Backend  *May 2017 → Oct. 2017 (11th – 12th grade)*
- Designed MySQL and MongoDB databases for storing parking spot sensor data and user data, respectively
- Designed a RESTful API written in Node.js to support UX on Android and iOS apps, and for recieving sensor data
- Wrote an implementation of Dijkstra's algorithm using Node.js for navigation, relying on user location data and data from Mapbox's API
- Used Twilio's SMS API to integrate two-factor authentication into the backend

## Noteworthy Technical Projects

**Incompare** *(personal, open source via GitHub)*  *2021 → Now*
- Using local tax rates and user-provided financial inputs, plots a parrallel coordinate graph with Plotly (using Python)
- Fetches/scrapes relevant data from SmartAsset.com's API using automatically detected, or user-provided zipcode

**Lightweight Messenger** *(schoolwork)*  *2020*
- Used Node.js and Socket.io to design a backend for a lightweight messaging system prototype
- Implemented a RESTful API with Express.js for interacting with a PostgreSQL database for user accounts, contacts, message history, etc.

*For more cool projects, don't hesitate to check out my GitHub!*

## Education

**University of Pittsburgh**, Pittsburgh, PA
B.Sc. in Computer Science, **3.4 in-major, 3.2 overall**  *Aug. 2018 → Dec. 2020*
**Dean's List:** *Spring 2020, Fall 2020*
**Notable coursework:** *Web Applications, Data Structures, Algorithm Implementation, HCI, Discrete Mathematics, Formal Methods*

## Interests

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|---|---|
| Private Online CS and English Tutor | *Oct. 2017 → Now* |
| Wikipedia Contributor (under username *Avigl*) — over 770k all-time article views | *June 2016 → Now* |