# David Lu

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### **SKILLS**

- Languages: Java, C++, JavaScript, Python, SQL, HTML, CSS, C, C#, Bash
- Tools: React, Node.js, Express.js, Unity, Linux, MySQL, UNIX, Git

#### **EXPERIENCE**

## FirstScreen | Full Stack Developer (Remote)

May 2021 - August 2021

- Created pages in the dashboard for vaccinations and attendance, with HTML components and SASS styling
- Processed data from **SQL** database into a vaccines table, using **Express.js** API fetches on **Node.js** backend
  - o Added functionality like adding new vaccine entries, exporting table to csv, editing profiles and filtering
- Wrote SQL queries to grab employee information and create unique UIDs to hide sensitive information
- Implemented a PIN generation tool for security, which would become invalidated after 24 hours, fully integrated to update the database when a new PIN is generated/deleted, or when a PIN becomes invalid

# Gradient Ascent AI | Full Stack Developer (Toronto, ON)

January 2020 – April 2020

- Parsed JSON data using Python into MySQL to create a database, and used it to create a dashboard for users
  of the "Greeter" app
- Wrote Python image scraping scripts to help further train the ML model for "Greeter"
- Improved the "Greeter" app's accuracy to 95% for recognition of new PPTs such as hard hats and lab coats

# C.I. Investments | Project Change Manager (Toronto, ON)

May 2019 - August 2019

- Implemented a VBA script for data cleanup; improved automation and saved up to 2 hours per usage
- Wrote a Perl script for database refresh which improved daily workload efficiency by 60%
- Analyzed and fixed **bash scripts** for daily production cycles

#### **PROJECTS**

Pokebank - React, JavaScript, Node.js, Firebase API, Voiceflow API

- Banking/Savings app meant to incentivize young people to put money in their savings accounts early
- App is linked to user's bank account and would check whether weekly/monthly goals, and reward users

Glasswings - Python, Django, AWS Sagemaker, Environmental APIs, Insurance APIs

- Crowd sourced insurance web app meant for youth to use as a reference for insurance pricing
- Built using an ML model to give an insurance price estimate based on location of user

# Conway's Game of Life - Java, JavaFX, Gradle

• Conway's game of life with animations, and functionality to create, delete, and draw custom shapes

#### **Brick Breaker** – C#, Unity

Brick breaker game created using Unity and C#, with a full interface for scoreboard and high score display

#### **EDUCATION**

# University of Waterloo

September 2018 – April 2023

- Bachelor of Computer Science (BCS with Co-op)
  - o Relevant Coursework: Algorithms, User Interfaces, OOP
  - o Currently Taking: Human Computer Interaction, Big Data, Security