Kevin **He**

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Skills

Programming	Python, C/C++, Javascript, Java, MySQL
Frameworks	PyTorch, Flask, Spring, Node.js, React, Webpack, Git

Work Experience

Tencent
MACHINE LEARNING ENGINEER

Oct. 2020 - Current
Shanghai, China

- Working on an **AutoML** model optimization system designed to deliver the most optimal ML model from user-provided data
- Implemented Hyperband (Lisha Li and al.) and BOHB (Stefan Falkner and al.) hyperparameter optimization algorithms for HPO

Bilibili Group
BACKEND DEVELOPER

Jan. 2020 - May. 2020
Shanghai, China

- Took part of Project Hawkeye, a **Java Spring**-based web scraping project monitoring all competitive products in the PVC figurine category and sales figures with **MySQL** database and **Redis** cache
- Increased precision of product name matching algorithm by **14%** using word separation analysis and one-hot encoding + cos similarity
- Improved the efficiency of the existing web scraping system by 700% by developing a new scraping system with the Node.js Puppeteer library and task clustering, which can handle 8000+ requests per hour
- Enhanced the project's anti-scraping bypass methods using **ADSL IP proxy** rotation and building **cookies + user-agent database**

Ford Motor Company
FULL-STACK DEVELOPER

May. 2019 - Sep. 2019
Waterloo, Canada

- Engaged in the Vehicle Infotainment bug report system developed in **Java Spring** and **Tomcat** server with **Knockout.js** frontend and **Splunk** database management
- Raised system user count by **20%** by improving report processing capabilities and displaying critical information from vehicle to users
- Increased frontend **report clarity** and **critical data awareness** by executing a major overhaul to the processing system's Knockout.js UI,adding better visuals and gathering vital build information

Presentation

Project Ava (Python, Javascript)

Sep. 2019

- Produced a video indexing website which displayed political standpoints and public information from an uploaded video of a political debate or speech
- Implemented video indexing using Microsoft Azure Video Indexer API and front end using React
- Hosted back end algorithm on Google Cloud Platform

Privacy Policy Index

Sep. 2019

- Developed an analysis program using machine learning to determine the readability + quality of privacy policies
- Implemented a linear regression machine learning model to determine the quality of policies on a scale from 0 to 5 basedon the presence of complex vocabulary within the policy
- Designed front end web UI with Ant Design, a React library

PAC-man.c

Oct. 2018

- Dveloped modern implementation of retro arcade game Pacman in C that runs in terminal and Arduino Uno modified as a gamepad
- Executed game design and implementation in C and programmed the modified Arduino controller in C++

Education

University of Waterloo
B.S. IN SOFTWARE ENGINEERING

Sep. 2018 - Jun. 2023
Waterloo, Canada