

Carl Shen

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Education

University of Waterloo — Honours Software Engineering, Co-op

Sept. 2019 - April 2024

Cumulative Average: 93% GPA

Skills

Languages Javascript, Python, Java, C/C++, Dart, HTML/CSS, Scala

Technologies NodeJS, ReactJS/Redux, Firebase, Flutter, Bootstrap, MongoDB, Tensorflow, Keras, Git, SQL, Flask, GCP, Docker, Kubernetes

Experience

NCR Corporation — Software Developer

January – May 2021

- Developed the API Toolkit (APIT) — a **Java/Maven** project that allows users to create working API endpoints with **Swagger/OpenAPI** specifications
- **Streamlined APIT usage** by serving it in an online sandbox environment with automated **Kubernetes** sandbox clusters in **GCP**
- Created frontend interface using **ReactJS**, **Redux** and **MaterialUI** for the sandbox environment

TD Innovation Lab — Software Developer

May – August 2020

- Developed solutions to pain points in financial technology and delivered to a panel of upper executives
- Developed a mobile app using **Google Cloud Vision**, **Firebase**, and **Flutter**, to find relevant scholarships using a photo of a student transcript. **Improved search times by 50%**
- Built a full-stack subscription management **Flutter** app integrated with **Parse Server** for authentication and data storage

Projects

Sagacity — Hack the North 2019, 1st /1500+ Hackers

devpost.com/software/sagacity

GPT 2, Google Cloud Platform, NodeJS, ExpressJS, MongoDB

- Built an application that converts pictures of fragmented notes into readable and organized notes
- Produced high quality notes using the **Open AI GPT 2** recurrent neural network
- Detected and read text using **Google Cloud Vision** text detection models

Moodly — Personal Project

github.com/JankyCS/mood_tracker

Flutter, Dart, Firebase, SQLite

- Developed a mood-tracker Flutter app with **240+ Downloads** on the Google Play Store
- Stored data locally using **SQLite** and encrypted/decrypted data with a **Firebase Cloud Function**

Writing Buddy — Personal Project

github.com/JankyCS/story-generator-nlp

Tensorflow, Keras, Flask, ReactJS, DiscordJS, BeautifulSoup4, Bootstrap

- Created an **A.I. powered** collaborative writing tool, served as a Discord bot and as a React app.
- Built a **LSTM Recurrent Neural Network** using **Tensorflow/Keras** for character-level text generation
- Scraped data using BeautifulSoup4, totalling **3.4 million characters**, and **85000+ training examples**

Interests

Baking Sourdough Bread, Investing, Personal Fitness, Playing Piano, Graphic Design