

Skills_____

Languages Java, Python, JavaScript, SQL, C, HTML, CSS

Technologies React.js, Node.js, Maven, Gradle, Android, SQLite, Git, Firebase, NumPy, Bootstrap

Projects_

Personal Website August 2020

evanzheng.com

• Built a responsive personal website using **HTML**, **CSS**, **Node.js**, **React.js**, and **Bootstrap.**

- Implemented functionality for contact forms and reCAPTCHA, completely eliminating spam.
- Deployed using Github Pages and Google Domains.

Shapevolve July 2020

evanzheng.com/Shapevolve

- Published a **Python 3** library that recreates artworks with circles using a genetic algorithm.
- Used NumPy, OpenCV, and Python multiprocessing libraries to **improve efficiency by 2x** over other implementations.
- Prototyped on Jupyter Notebooks, packaged using PyInstaller, and released on PyPI.

Three-Body Simulation

June 2020

evanzheng.com/threebodysimulation

- Developed a **JavaFX** desktop app to computationally simulate the three-body problem in orbital mechanics.
- Optimized app performance and fixed several concurrency issues to ensure the simulation was **responsive in real-time**.
- Packaged into a native Windows app using GraalVM and a cross-platform JAR file using Apache Shade and Launch4J.
- Used Maven build tools and Apache Commons Math and CSV libraries, as well as Bootstrap CSS styling.

BiblioBarcode March 2020

evanzheng.com/BiblioBarcode

- Built an **Android** app that scans photos of book barcodes to create a bibliography stored on a **SQLite** database.
- Written using Java and SQL on Android Studio, with Gradle build tools.
- Utilized the Google Books API and the Google Mobile Vision Barcode API, among others.

Honors & Awards

Direct Qualification, Top 50, Canadian Mathematical Olympiad

March 2021

Distinction, Top 10%, Canadian Computing Competition

February 2021

Qualification to Gold Division, USA Computing Olympiad

March 2020

Work Experience _____

Kumon Math and Reading Centre of Vaughan- Dufferin Hill

Vaughan, ON

Assistant Teacher and Grader

September 2019 - March 2020

- Taught mathematical concepts from basic counting up to integral calculus for students aged 5-18.
- Helped students develop writing and literacy skills as part of Kumon's reading program

Education _____

St. Theresa of Lisieux CHS

Richmond Hill, ON

Ontario Secondary School Diploma

September 2017 - June 2021

• Principal's List with a cumulative average of **99%** during the 2020-2021 school year.

Online Courses: Harvard CS50x, Stanford University Machine Learning