Harry Chen

Frontend/Fullstack Developer

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Skills

Languages	JavaScript, Python, HTML/CSS, Java
Development	React, Node, Express, EJS, MongoDB, Firebase

Experience

NCR Corporation - TellerUI Team   *Waterloo, ON*
Frontend Developer   *Sept. 2022 - Dec. 2022*

- Developed, tested, and optimized a core interactive call component with remote functionality and 80% decreased call latency to connect customers to virtual tellers in a commercial ATM banking app using React and JavaScript.
- Streamlined implementation of unit tests and modernization of archaic unit tests, increasing code coverage to 100%.
- Fixed over 50 critical and high risk Sonar errors efficiently, reducing technical debt by an estimated 80 hours.
- Optimized frontend menu icons and components for redundancy and standardization to condense package size.

SCS Consulting Group - Site Plan Team   *Markham, ON*
Site Plan Designer   *Jan. 2022 - Apr. 2022*

- Pioneered custom-coded functions and smart labelling systems in modelling software to reduce model setup times.
- Scrutinized design standard database by improving information organization, reducing turnover time on projects.
- Augmented workflow of site plan team by optimizing schedules and team reviews to reduce administrative load.
- Utilized Civil3D, AutoCAD, Excel VBA, and Land Development Toolkits to complete design work ahead of deadlines.

York Region - Corporate Services   *Newmarket, ON*
Development Engineer   *May 2021 - Aug. 2021*

- Purged over 90% of stale security backlog from land developers by efficiently digitizing old files using databases.
- Assisted in standardizing and optimizing review of pre-submission consultation documents to increase project turnover speed.
- Resolved reviews of development sites and expedited over $10 million of projects by automating review process.

Projects

TrailGrail   *View Project*
Fullstack Webapp   *Nov. 2021 - Mar. 2022*

- Allows visitors to create authenticated accounts and submit & delete trails with their locations, photos, names, and details.
- Accounts can also submit and delete their own reviews on other submitted trails including a star score and comment.
- Website created using Express and Node; accounts, locations, and reviews stored in MongoDB; previously deployed with Heroku.
- Security features include input validation against HTML injections and hashing & salting of account usernames and passwords.

SiteSticky   *View Project*
Chrome Extension   *Feb. 2022 - Apr. 2022*

- A lightweight Chrome browser extension leveraging Chrome API, HTML & CSS to keep track of notes using Chrome storage.
- Automatically truncates URL to store site host name and uses Chrome context menu when highlighting text to quickly add notes.

Personal Portfolio Website   *View Project*
Frontend Webapp   *Apr. 2022 - current*

- Utilized React and HTML/CSS (SASS) to create a portfolio website with detailed transitions and versatile components from scratch.

Dynamic Traffic Coordination Design for Arterial Roadways
Fourth Year Design Project - University of Waterloo   *Jan. 2023 - Mar. 2023*

- Designed an algorithm in Python to optimize traffic light offset coordination for platoons of vehicles and successfully reduced automobile queuing lengths at intersections by 50% and travel delay time by 9.7% in traffic modelling software.

Education

University of Waterloo   *Waterloo, ON*
Bachelor's in Applied Sciences - Engineering   *2018-2023*

- Maintained excellent academic standing throughout all semesters (3.7 GPA).
- Active involvement in Steel Bridge Team and SERVE Volleyball Club in executive leadership positions.
- Outstanding or Excellent rating throughout all co-op internships.