Kaiyuan Yang

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PROGRAMMING SKILLS

- **Programming Languages**: Java, C++, C, TypeScript(JavaScript), Racket, Python, MySQL, LaTeX
- **Tools & Framework**: Git, Node.js, Mocha, Vscode, IntelliJ, JUnit, MySQL, JDBC, Selenium

SELECTED WORK EXPERIENCE

- **Software Developer** — Vancouver, BC
  Building Blocks — *March 2021 – present*
  - Working in the frontend team with agile development environments.
  - Using Trello to create and assign user stories.

- **Teaching Assistant for CPSC121 / CPSC213** — Vancouver, BC
  Department of Computer Science, UBC — *Jan 2020 – present*
  - Directed labs, tutorials; Held weekly office hours; Assisted over 200 students in understanding course concepts.
  - Held weekly meetings to discuss online teaching issues and ways to improve.

- **CS Instructor** — Vancouver, BC
  Easy Eduation Vancouver — *Sept 2020 - Jan 2021*
  - Designed the entire Software Software Construction tutoring material for college level students, including the UML diagrams, Object-oriented programming knowledge, design principles and design patterns. Improved their overall grades from C to A.
  - Inspired students with new idea on the course project. Taught them how to debug on their project.

SELECTED PROJECTS

- **Flybook (Workspace Application)**   Java, JUnit, JDBC, MySQL, IntelliJ   Sept-Dec 2020
  - Developed a Java application that simulates work scheduling on meetings while allowing the social networking functionality on an enterprise level.
  - Managed to delete, update, and store all the information using JDBC and MySQL queries.
  - Embedded Aggregation and Division queries to achieve useful functionalities.

- **Insight UBC Query System**   TypeScript, Node.js, Mocha, Git, IntelliJ   Sept-Dec 2020
  - Developed a Web application with rest endpoints using TypeScript; Implemented a query engine that can parse and query UBC courses and room data according to the chosen constraints.
  - Implemented a data controller that can parse HTML and JSON data and a query controller that handles queries in the form of JSON Object.
  - Followed Test-Driven Development process, and wrote Robust tests for both backend and frontend

- **MiniRacket Compiler**   Racket   Jan-April 2021
  - A Compiler for a subset of Racket to machine language (x86-64 CPU instruction set with Linux system calls). This includes the phase of intermediate representation, code generation and optimization.
  - Wrote Robust Unit tests for each compiling pass.

EDUCATION

- **University of British Columbia** — Vancouver, BC
  Bachelor of Science, Honors in Computer Science — *September 2018 – April 2023 (expected)*
  - **Grade Average (Cummulative)**: 90.3%

AWARDS

- **Trek Excellent Scholarship, UBC** — *2019/2020*
- **Dean's Honor list** — *2020*