

# Kavpreet Grewal

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## EDUCATION

### University of British Columbia

September 2019 – May 2023

*Bachelor of Science in Computer Science – GPA: 92.5 / 100*

*Vancouver, B.C*

- Coursework: Algorithms and Data Structures, Software Construction, Computer Systems
- Awards: Y.P. Heung Foundation Award in Science – Awarded to the top 6 students in cohort of 2000 students

## TECHNICAL SKILLS

### Programming Technologies

Java, JavaScript, C++, Python, TypeScript, Dart, HTML, CSS  
Node.js, Express.js, React, Flutter, MongoDB, Firebase, Git

## EXPERIENCE

### Software Developer

September 2020 – Present

*UBC Launch Pad Software Engineering Club*

*TypeScript, Node.js, React, MongoDB*

- Developed a recruitment and club application tool to streamline the recruitment process for student clubs
- Implemented a system to parse applicants' information from a Google Sheet and store the data in MongoDB database
- Reduced application review time by 25% by developing a REST API using Express.js to generate applicant profiles from a Google Sheet, which could then be reviewed and directly graded on the web application
- Collaborated with a team of 7 developers, designers, and strategists in a professional agile environment

### Mentor – Programming Team

September 2019 – Present

*L.A. Matheson Robotics*

*Java, LabView*

- Mentored team of 7 programmers during their participation in the FIRST Robotics Competitions
- Taught high school students programming fundamentals in Java and LabView by organizing weekly coding workshops
- Taught programming and promoted participation in robotics to students from schools in the surrounding community

### Programming Team Lead

September 2017 – June 2019

*L.A. Matheson Robotics*

*Java, LabView*

- Managed team of 5 programmers during team's participation in the FIRST Robotics Competitions
- Increased score output by 42% by optimizing robot's code for efficiency and speed during its autonomous operation and for automatic driver aids
- Led team to 5th place finish at the 2019 FIRST World Championship out of nearly 8000 competing teams worldwide

## PROJECTS

### Notify – SMS News | *JavaScript, Node.js, MongoDB*

- Designed an application to send news article summaries by SMS to those without reliable internet access
- Integrated News API with IBM text summarization using Node.js to fetch top news articles based on user's query and then generate short summaries to send back to the user
- Reduced news article and text summarization requests by 15% by caching search results in MongoDB database

### OnTrack – Time Tracker | *Dart, Flutter, Firebase*

- Developed an iOS and Android application using Flutter to help users log hours towards their goals
- Implemented user authentication and sign-in with Google using Firebase
- Used Firebase to store record of logged hours associated with user's account for easy access on any device

### Touchless Webpage Scroller | *JavaScript, TensorFlow*

- Built a browser extension with JavaScript to enable users to scroll webpages without touching their device
- Enhanced and simplified user experience while browsing the web by utilizing TensorFlow hand tracking to allow users to scroll by simply raising one or both hands