

KEVIN HE

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TECHNICAL SKILLS

- **Programming Languages:** Python, R, C++/C, MATLAB, Maple, x86
- **Operating Systems:** Windows, Ubuntu (Linux)
- **Software:** Microsoft Office (Word, Excel, PowerPoint), Git

WORK EXPERIENCE

Department of Mathematics, Simon Fraser University | Burnaby, BC
Undergraduate Student Researcher

May 2020 - Present

Project: Assessing Radicalization Pathways on Online Platforms

- Automating data collection on YouTube by web scrape over 1000 channels, videos, and comments using Selenium
- Creating Markov and Random Walk models of YouTube video consumption to assess YouTube's algorithmic bias

Science World | Vancouver, BC
Science and Robotics Facilitator

Jul 2017 - Present

- Developing and instructing a 6-lesson introductory programming and robotics program using Lego Mindstorms
- Increasing STEM literacy through hands on work shops and Centre Stage presentations
- Hosting OMNIMAX theatre shows and presentations of upwards to 200 people

PROJECTS

MapleRank: MapleStory Player Exploratory Analysis | Python + R

May 2020 - Present

- Created a web scraping algorithm to collect data of over 20,000 players in the NA/EU Server using BeautifulSoup4
- Analyzed the player trends in different Jobs, Worlds, and Levels to reveal trends in player data using R

Optimizing Course Planning for the Operations Research Major | Excel

Feb 2020 – May 2020

- Analyzed historic course availability data from multiple departments at SFU to forecast the schedule of future courses
- Created a mixed-integer linear program in Excel to select the optimal placement of courses and electives in each semester

EXTRA-CURRICULAR ACTIVITIES

Operations Research Student Union
Vice-President

Jan 2019 - Present

- Leading a team to coordinate the publication of Analytics Now, a peer reviewed journal in Operations Research
- Moderating union meetings following the set goal of promoting the field of Operations Research at SFU
- Increasing community within the Mathematics department through hosting semesterly workshops and social events

UNICEF Simon Fraser University
Vice-President Finance

Aug 2019 - Present

- Raising funds for UNICEF Canada through collaborations with external organizations to host the annual UNICEF SFU Gala
- Analyzing onboarding and event data to build predictive models for maximizing profit of future events
- Mentoring club executives through monthly meetings discussing goal setting and personal development

EDUCATION

Simon Fraser University | Burnaby, BC

Completion: May 2022

Honours in Operations Research, Minor in Computing Science, B.Sc | Co-op

- **Awards:** NSERC Undergraduate Student Research Award, Pathway to Teacher Education, District/Authority Community Service, BC Achievement, National Citizenship Award
- **GPA and Honours:** 3.64/4.33, President's and Dean's Honour Roll
- **Competitions:** Systems Hacks 2018 (First Place Team): Created a visual novel using HTML surrounding the theme of Valentine's Day

INTERESTS

- **Coffee and Tea:** Currently attempting to ferment Kombucha tea as well as invested in espresso brewing
- **Mobile Technology:** Knowledgeable about cell phone technologies specifically in software features
- **Parks and Tourism:** Enjoys exploring museums and tourist attractions to improve my skills as a science interpreter