Kevin Li

Mississauga, ON | 647-607-8915

k378li@uwaterloo.ca | linkedin.com/in/kevin-li-16807 | github.com/li-kevin-16807

Education

University of Waterloo | Waterloo, ON — Sept. 2020 – (Expected) April 2025
- ❖ Candidate for B.A.Sc., Mechatronics Engineering, Honours
- ❖ **Weighted Average:** 96.0% (4.0 GPA)

John Fraser Secondary School | Mississauga, ON — Sept. 2016 – June 2020
- ❖ Graduated with an academic average of 98.7%

Skills

Languages:
- ❖ **Proficient:** C++, Python
- ❖ **Familiar:** HTML, CSS

Tools:
- ❖ SolidWorks, AutoCAD, Arduino, GitHub, Git, Bootstrap, LaTeX, Microsoft Excel, Altium Designer, GrabCAD Print, GD&T

Experience

Midnight Sun Design Team (Solar Electric Vehicle) — University of Waterloo
Electrical-Hardware Subteam Member — Sept. 2020 – Present
- ❖ Researched and proposed various sensor implementations for a collision avoidance system
- ❖ Developed basic PCB design and board review skills with Altium Designer
- ❖ Developed familiarity with Confluence to communicate task progression and access relevant team resources

HOSA (Health Occupations Students of America) — John Fraser Secondary School
Club President — Sept. 2019 – June 2020
- ❖ Led and managed a team of executive training coordinators by scheduling bi-weekly meetings to delegate tasks and receive updates on training progress
- ❖ Managed the registration process and transportation logistics for a two-day excursion to the national level of competition, HOSA State Leadership Conference (SLC)
- ❖ Designed social media advertising content, attracting over 180 students in attendance at recruitment meetings

Math and Science Senior Scholars — John Fraser Secondary School
Tutor — Sept. 2019 – June 2020
- ❖ Provided ambitious students with tutoring in mathematics, physics, chemistry, and biology between school hours with the focus of training an intuitive understanding of concepts
- ❖ Created challenging mathematics practice assessments composed of difficult thinking questions for classmates using LaTeX to exercise problem solving and analytical skills

DEEP Summer Academy — University of Toronto
Participant — Summer 2019
- ❖ Programmed a simple controller for a small operable wooden arm using Arduino
- ❖ Partly programmed an AI to recognize written numbers using NumPy and TensorFlow, developing an understanding of various machine learning topics by interacting with convolution matrices and exploring methods of optimizing training accuracy

Jenny's Art Studio — Scarborough, ON
Assistant Art Instructor — May 2018 – Sept. 2019
- ❖ Worked with students of varying ages to develop and improve skills in freehand sketching, and acrylic and watercolour painting

Projects

Goose Escape | C++ — Nov. 2020
- ❖ Programmed a two-dimensional level-based arcade game using C++ and the BearLibTerminal library where a player attempts to reach safe zones while being chased by an NPC in the form of a goose
- ❖ Implemented fully randomized map generation and adjustable NPC intelligence to enable the ability to increase and modify the complexity and difficulty of the game as it progresses

Cellphone Stand | SolidWorks, GrabCAD Print — Nov. 2020
- ❖ Created a retractable cellphone stand with two hinge mechanisms using SolidWorks suitable for 3D printing
- ❖ Developed familiarity with 3D printing logistics and optimizing material usage with GrabCAD Print

Personal Portfolio Website (kevinli.ca) | HTML, CSS, Bootstrap, GitHub, Git   Jan. 2021
   ❖ Designed a fully responsive portfolio website containing several animation features using HTML, CSS, Bootstrap, and a few plugins
   ❖ Hosted the website using GitHub Pages by cloning and pushing the files and changes associated with the website onto a GitHub repository using Git
   ❖ Modified the domain of the website to a custom domain purchased from Namecheap

Conveyor Assembly | SolidWorks, AutoCAD   Oct. 2020 – Dec. 2020
   ❖ Worked with a team of individuals to construct models of a conveyor assembly for sorting packages
   ❖ Developed an AutoCAD model for the conveyor assembly using Layers and Blocks to assess measurements and formulate reasonable component selections from real suppliers
   ❖ Assisted with developing the SolidWorks model of the conveyor assembly by selecting appropriate mates and locating various SolidWorks models of components from digital supplier resources

Single Fastener Bottle Cage | SolidWorks   Dec. 2020
   ❖ Developed a bottle holder for cycling requiring only a single fastener for installation using SolidWorks

Awards

President's Scholarship of Distinction   University of Waterloo | Aug. 2020
   ❖ Awarded by the University of Waterloo for achieving an admissions average of above 95%.

Graduate Academic Award   John Fraser Secondary School | Jan. 2021
   ❖ Awarded for graduating with the highest average calculated on six senior level courses (98.7%) in the 2019-2020 school year at John Fraser Secondary School

HOSA SLC and HOSA ILC (National and International)   HOSA Canada | Apr. 2019 and June 2019 Respectively
   ❖ Placed 4th and Top 32 in the event category 'Biomedical Debate' at the national and international level HOSA competitions respectively (HOSA SLC 2019 & HOSA ILC 2019)

Undergraduate Academic Awards   John Fraser Secondary School | June 2019
   ❖ Awarded for achieving the highest academic averages in Grade 11 Functions (MCR3U0), Grade 11 Chemistry (SCH3U0), and Grade 11 Introduction to Anthropology, Psychology, and Sociology (HSP3U0) during the 2018-2019 school year at John Fraser Secondary School