

SETU POTNIS

Nanotechnology Engineer

GET IN TOUCH!

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SKILLS

- Able to work in a team and independently
- Oral and written communication skills
- Fluent in both English, and French

Working knowledge in :

- Python
- JavaScript, HTML, CSS, React, React Native
- Swift, XCode
- R, MatLab
- Git
- Microsoft Suite

Through relevant coursework, I have:

- Created while and for loops, and NumPy in Python in order to solve complex problems
- Recorded projects on GitHub through git on Mac terminal
- Used NumPy and various modules in order to simplify solutions for problems to optimize time
- Employed regression models in MatLab to find line of best fit through an arbitrary amount of data points
- Designed with three-dimensional modelling software, specifically SolidWorks
- Practical circuit experience with breadboards, inductors, and capacitors in order to make RL and RC circuits
- Used a digital multimeter to measure AC and DC voltage and current as well create an AC source through a wave generator
- Experience with an Oscilloscope through labs in order to measure square, sinusoidal, and triangular waveforms

PROJECTS

Enrich Tutors (working)

- Connects students from Waterloo to tutors who are well equipped to help them succeed (<https://enrichtutors.com>)
- Facilitated through a mobile app built with React Native called Enrich

Freelance Web Development

Built websites for peers with HTML, JavaScript and CSS in order to gain practical experience with the art of web development and website design protocol

Tourism Recommendation Engine

- Produced a tourism engine using the Python scripting language through lists and dictionaries as well as string methods in order to make it easier for consumers to look for vacation spots
- Employed algorithm that takes user input, such as price range and country to make a detailed plan of plausible activities to partake in

Scanning Tunnelling Microscope (STM)

- Designed a fully functioning scanning tunnelling microscope with use of the engineering design process cycle
- Incorporated relevant course knowledge from linear circuits, materials science, and chemistry, specifically the circuit built with op-amps and capacitors, the tip of the microscope constructed through a redox reaction, and the construction of a piezoelectric disc in order to operate the microscope
- Constructed three dimensional model of STM with SolidWorks

WORK HISTORY

City of Brampton

Ice-Skating Instructor | (2016-2018)

- Taught classes of 10 students aged 4-10 how to perform a variety of varying skill levels and intricacies in a safe and effective manner
- Achieved best passing rate compared to all other instructors by giving excellent demonstrations and inspirational motivation
- Reviewed and demonstrated weekly exercises with students and identified areas of improvement for the students
- Explained creative skating circuits tailored for the engagement of the students and to create a comfortable environment

ACADEMIC BACKGROUND

University of Waterloo (Expected, Class of 2023)

Bachelor's of Applied Science | Nanotechnology Engineering

- Multi-disciplinary engineering field, which draws from and benefits areas such as materials science, programming, physics, and chemistry
 - Knowledge in Data Structures and Algorithms, Computational Methods, and Fabrication
 - President's Scholarship of Distinction (2018) Stanford University
- ### Certificate | Machine Learning (2018-2019)
- Basic knowledge of neural networks, and regression algorithms and their use in MatLab as well as their optimization at the kernel level