

## EDUCATION

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- **Stanford University** Palo Alto, CA  
*Master of Science in Civil & Environmental Engineering; GPA: 3.96/4.0* Expected Apr. 2024
  - **Courses:** Infrastructure Project Delivery, Data Analysis for Urban Systems, Deep Multi-task & Meta Learning, Mining Massive Datasets, AI Applications in AEC, Product Management, Urban Systems Engineering
- **University of Toronto** Toronto, Canada  
*Bachelor of Applied Science in Civil Engineering, Minor in Artificial Intelligence; GPA: 3.95/4.0* 2017 - 2022
  - **Courses:** Steel & Timber Design, Reinforced Concrete Design, Structural Dynamics, Structural Analysis, Data Structures, Software Engineering, Intro to ML, Applied ML, Intro to AI, Data Science for Civil Eng.

## WORK EXPERIENCE

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- **Digital Engineering Intern** Los Angeles, CA  
*Arup* Jun 2023 – Aug 2023
  - Developed tools and actionable metrics to advance digital design delivery on the BART Silicon Valley megaproject.
  - Worked with bridge engineers to deploy data-driven workflows that automate & accelerate the post-processing of FEA models; created Python, SQL and Grasshopper scripts to manage and visualize >1M rows of analysis results.
  - Derived actionable insights from data to measure and ensure that digital initiatives are delivering business results.
- **Graduate Research Assistant** Stanford, CA  
*Stanford University, Our Communities Our Bay project* Apr 2023 – Jun 2023
  - Studied the health impact of climate hazards and implemented technologies to protect vulnerable communities.
  - Developed R scripts to collect and analyze real-time air quality sensor and sleep tracker data, then created a Python program to summarize and distribute personalized research findings and recommendations to study participants.
- **Data Science Engineering Intern** Stanford, CA  
*Stanford University, Energy Operations Department* Oct 2022 – Present
  - Build data pipelines using data mining and ML techniques to manage energy needs in >1000 buildings on campus.
  - Develop Python and SQL applications to monitor equipment performance, forecast loads, and manage databases.
  - Perform exploratory data analysis, data wrangling, and statistical analysis to extract insights for plant engineers.
- **Civil Engineering Intern** Toronto, Canada  
*Terrestrial Energy Inc.* Sept 2020 – Aug 2022
  - Contributed to the development of the Reactor Auxiliary Building (RAB) layout, conducted seismic analysis of RAB and the reactor vessel, and designed the reactor vessel support structure and other safety-related structures.
  - Performed aircraft impact analysis by researching methodologies and developing Python scripts that interfaces with structural design software through an API; presented novel findings at a global nuclear conference.
- **Structural Engineering Intern** Toronto, Canada  
*Arup* Jun 2020 – July 2020
  - Designed retrofit strategies to mitigate damages from crowd-induced floor deflection for 1,700-seat conference room.
  - Developed computational modules for a C# application that automates engineering calculations and streamlines iterative design processes via dynamically generated web APIs to accelerate project delivery by 10%.
- **Software Developer Intern** Toronto, Canada  
*Rocscience Inc.* May 2019 – Aug 2019
  - Researched & implemented computational features for a 3D geotechnical analysis, design, & visualization software.
  - Designed backend and UI using C++ to compute seismic-induced foundation settlement and compare ground improvement techniques, leading to 2 successful software updates reaching hundreds of engineers / users in industry.

## SKILLS

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- **Programming:** Python, MATLAB, C++, SQL, R, C#, Spark, HTML/CSS, JavaScript, Java, Excel VBA
- **Analysis & Modelling:** SAP2000, ETABS, Midas Civil, GSA, AutoCAD, Revit, SketchUp, Abacus, ANSYS, ArcGIS