Kosta Gianicos – Aspiring Engineer

Education:
Engineering Physics, Engineering Physics Co-op (B.Eng.) Expected Completion, April 2023
McMaster University, Hamilton ON
- Awarded the McMaster Entrance Scholarship for an admission average exceeding 90%
- Awarded the Research Experience award along with being top 1% of all applicants.
- Awarded the Dundas Scholarship

Relevant Courses:
- ENGPHYS 2E04 "Analog and Digital Circuits"- *Design and analysis of analog and digital electrical circuits - component analysis, circuit analysis and theorems, binary numbers, Boolean analysis, and digital circuit design.*
- ENGPHYS 2CM3 "Computational Multiphysics"- *Enhances skills on Maple, FlexPDE and Python to solve high level Engineering problems from several fields of Physics.*

Skills:
- Experience in many programming languages and programming fields. Physical Analysis with Python, Maple, FlexPDE, C++. Front End Development with React, VueJS, JS, css/sass. Back End Development with Golang.

Work Experiences:
McMaster Engineering Physics, Hamilton, ON   **July 2018 - August 2018**
Research Assistant
- Worked in Dr. Ray LaPierre's research group on the topic of semiconductor nanowires.
- Used image processing (OpenCV) with Python to develop nanowire analyzing softwares.
- Projects determine yield and dimensions of nanowires on silicon wafers.
- Communicated my results in team meetings where I was among graduate level students.

FyeLabs, Hamilton, ON   **May 2020 - July 2020**
Research Assistant
- Used Python/C++ to implement an OpenCV driven point plotting algorithm that converts real life (x,y,z) points from a runway to image (u,v) points on an image and vice versa.
- Used the Vuetify framework (HTML, JS, CSS, SASS) to create front end views for an internal dashboard project.
- Used HTML and JS with Google Web Serial API to help develop a web platform for the iOLab wireless lab system. This was a project for a University that allows students to perform at home physics labs due to COVID-19.
- Used Go with an Elastic Search database to build several APIs and back-end services for the internal dashboard project. Used Swagger.io and Lucid Chart to create documentation and an entity relationship diagram to make front end to back-end integration easier.

McMaster University (Engineering 1), Hamilton ON   **September 2020 – December 2020**
Teaching Assistant: Physics 1D03, Introductory Mechanics
- Responsible for the marking of two lab sections heavily focused on getting students introduced to calculating uncertainties and creating professional lab reports.

McMaster University (Engineering 1), Hamilton ON   **January 2021 – April 2021**
Teaching Assistant: Physics 1E03, Introduction to Electromagnetism and Waves
- Hold weekly office hours to help students with questions regarding labs.
- Responsible for the marking of two lab sections with labs based on first yea physics circuit analysis (KCL, Capacitance, voltage dividers, and more)
- Responsible for marking portions of midterm, and exam.