MOBILE
(647) 992-6803
EMAIL
keant1@mcmaster.ca
WEBSITE
www.tommyk.engineer
LINKEDIN.com/in/
thomas-kean-maceng
GITHUB
github.com/keant1

Thomas Kean

HIGHLIGHTS OF QUALIFICATIONS

Quick Learner – Evident through my success and recognition while working at Hatch Ltd. as a co-op student

Leadership Acumen – Developed through multiple roles on the McMaster Engineering Society

Team Oriented – Developed as a member of the McMaster EcoCAR Propulsion Controls and Modelling sub-team

EDUCATION

McMaster University
Expected Graduation:
May 2022

Bachelor of Engineering Physics and Management (Co-op)
Currently enrolled in level 3 of a 5-year co-op program with an intended specialization in Digital & Smart Systems Engineering

PROJECTS

PID Controller Design
Executed PID control of a microcontroller simulating a thermal electric cooler using MatLab and C Programming.

Ultrasonic Range Finder
Developed a device to provide distance measurements using ultrasonic acoustic waves and electronic circuitry.

Sequential Logic Design
Digital display to cycling through my student number using Boolean logic, digital and analog circuitry

LAB SKILLS

Embedded Devices

Digital and Analog Circuit

Oscilloscopes

Function Generators

Multimeters

WORK EXPERIENCE

Teaching Assistant — Sep 2019 – Apr 2020
McMaster Engineering Career and Coop Services

- Developed strong **coaching skills** by mentoring students in career and co-op development
- Demonstrated **attention to detail** during one-on-one resume critiques

Mechanical Engineering Co-op Student — May - Aug 2019, Jul - Aug 2017
Hatch Ltd.

- Demonstrated **data analytical skills** by implementing automated analysis of mechanical equipment lists with the **Python Pandas** data analysis library
- **Improved efficiency** by developing python and excel tools to reduce time required to calculate equipment and stockpile sizes
- Utilized **strong written and verbal communication** when presenting noise propagation models and vibration analysis.
- Participated in engineering design reviews, demonstrating **problem solving** skills to deliver robust high designs of a high standard of quality to clients

Fire Protection Engineering Co-op Student — May - Aug 2018
Hatch Ltd.

- Worked with **an interdisciplinary team** to conduct a fire hazard analysis of a high-risk of contamination facility
- **Learned quickly** when conducting a hydraulic calculation for a fire ring main in an ore refining facility
- **Worked independently** to apply engineering principles to perform calculations for mechanical equipment design and piping system design of industrial buildings

(647) 992-6803
keant1@mcmaster.ca

Thomas Kean

LANGUAGES

MatLab

Python

C/C++

JavaScript

HTML & CSS

SOFTWARE

Simulink

Multisim Circuit Simulator

MS Office Suite

Raspberry Pi

Maple

FlexPDE

TOOLS

Node.js

Bootstrap

TensorFlow

Git

Bash

AWARDS

Hatch Student Showcase Winner, 2018

First place in both Best in Show and Best Content Selection categories

Five Scholarships Received for outstanding academic performance and extracurricular involvement.

Grade 12 French Award

Grade 12 English Award

EXTRACURRICULAR EXPERIENCES

Orientation Week Committee Member Jan 2020 – Present
McMaster Engineering Society

- Plan and develop events **adaptive** to a diverse group of incoming first-year students to foster a culture of inclusion and mentorship
- **Communicate with multiple stakeholders** to coordinate leadership and orientation events for over 1000 first year students and 150 Engineering representatives

Propulsion Controls Modeling Specialist Mar 2019 – Present
McMaster EcoCAR Team

- **Collaborate** to hybridize propulsion systems and improve the energy efficiency of a 2019 Chevrolet Blazer for the EcoCAR mobility challenge
- Developed control strategies using **MatLab Simulink** to optimize fuel and battery consumption, balancing rear high voltage electric motor and engine use

Public Relations Coordinator May 2019 – Apr 2020
McMaster Engineering Society

- Increased **student engagement** through social media campaigns resulting in a **100% growth** of social media followers over a year
- Demonstrated **planning and organizational skills** by managing several student events and campaigns on multiple social media platforms

The Drain Jan 2019 – Dec 2020
Service Desk Volunteer

- Utilized strong **customer service skills** by volunteering at the McMaster Engineering Society's student shop and service desk
- **Supported** on-boarding of new service desk volunteers to ensure consistent high quality of customer satisfaction

Faculty Representative May 2018 – Sep 2019
McMaster University, Faculty of Engineering

- **Fostered community** by welcoming **1000+** first-year students to McMaster Engineering during Welcome Week 2018 and 2019
- Entrusted to lead events in a **fast-paced environment** for first-year students while ensuring student engagement and comfort

Delegate Jan 2019
Canadian Engineering Leadership Conference

- **Engaged** with engineering students at the Canadian Federation of Engineering Students' annual leadership conference
- **Problem solved** to address corporate social responsibility in engineering and how to implement it in our student communities