Huzaifa Khan

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EDUCATION University of Waterloo

Waterloo, Canada

BASc in Mechanical Engineering

April 2020

• Capstone: Autonomous EV Charging Robot for Robo-Taxis

INTERESTS

Autonomous Vehicles, Robotics, Machine Learning

WORK EXPERIENCE Voyage Labs

Waterloo, Canada

Robotics Engineering Intern

Sep 2019 - Dec 2019

• **Highlights:** Developed an automated electro-mechanical system for testing THC biosensors using a 3-axis robot.

Tesla

Palo Alto, USA

Mechanical Design Engineering Intern

Jan 2019 - Apr 2019

• **Highlights:** Designed sheet metal and structural components for an industrial energy storage system (Megapack). Optimized the structural integrity of designs through performing FEA.

Manufacturing Engineering Intern

Sep 2018 - Dec 2018

• **Highlights:** Designed and implemented equipment modifications in Energy Module process, yielding \$1.5M in savings through scrap reduction.

Test Engineering Intern

Jun 2018 - Sep 2018

• **Highlights:** Collaborated with cross-functional teams to test and validate over 20 production changes for Model S/X powertrain. Analyzed large data sets using statistical methods to suggest improvements.

Toyota
Mechanical Engineering Intern

Cambridge, Canada Jan 2018 - Apr 2018

• **Highlights:** Designed an end-effector for a part-transfer robot on the Corolla engine compartment welding line, successfully allowing multi-model capability.

AWARDS	ASME Northern Alberta Design Award	2020
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General Motors Innovation Award	2020
Engineer of the Future Fund	2020
Hack for Health Competition Winner	2015
University of Waterloo President's Scholarship	2015

SKILLS Languages: Python, C++, MATLAB, G-Code, LATEX

Technologies: Arduino, LabVIEW, TensorFlow, SolidWorks, CATIA

Design: detailed assemblies, metal/plastic parts, materials, statics, DFM, GD&T

RELEVANT COURSES Mechanical Design 2 (ME423); Advanced Dynamics and Vibrations (ME524); Fatigue and Fracture Analysis (ME526); Manufacturing of Mechanical Materials & Compos-

ites (ME596)