Glasgow, G52 1NH | 07818164765 | gregormacaskill@gmail.com

Education		
University of Glasgow	James Watt School of Engineering Est MEng Aeronautical Engineering	xpected 2018 - 2023
	Engineering Excellence List 2019, 2020, 2021 Vice President of Glasgow University Aerospace 2020 <b>Predicted First Class Honours</b>	
Glasgow Gaelic School	Dux of School, Prefect, and Gaelic Ambassador Advanced Higher: Mathematics, Physics, Computing Science (AA	<i>2012 - 2018</i> A)

# **Engineering Experience**

## **OirthirSAT**

#### **AIT Engineer**

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- Competing for a £600k challenge fund to further the development of a climate mission nanosatellite as one of five shortlisted teams in LaunchUK's Nanosatellite Design Competition.
- Designing a nanosatellite that utilises onboard processing to analyse shorelines to better inform scientists and policymakers on the impact of climate change on coastal areas.

## **GU Orbit Micro-Satellites**

#### Mechanical Team Leader

- May 2021 Present • Responsible for recruitment, co-ordinating regular subteam communication, and allocating relevant tasks to each team member depending upon individual experience.
- Spearheading the technical direction of the team by devising inventive design solutions that ensure structural integrity, thermal robustness, and manufacturability of the cubesat.

#### Mechanical Team Member

- Programatically studied the deployment dynamics of tape spring booms used to deploy a drag sail to deorbit a 3U cubes at its end-of-life mission phase.
- Devised a viable housing solution using CAD to allow for effective storage, release, and deployment of a quasi-rhombic pyramid drag sail.

#### **UGRacing Formula Student**

#### **Driverless Vehicle - Motion & Control**

Aug. 2021 - Feb. 2022 • Developed the vehicle dynamics model and accompanying control system for UGR's 2022 Driverless Vehicle by creating a PID controller that utilised EKF state estimation using MATLAB and Simulink.

## **Combustion Vehicle - Vehicle Dynamics**

- Optimised key vehicle suspension parameters by remodelling the team's approach to suspension design through building upon historical research and solving complex optimisation problems.
- Generated essential documentation to explain the solution methodology of suspension calculations to other subteam members and new recruits.

# Work Experience & Volunteering

#### Redcrest E.M.S. Medic

• As a medic at concerts, festivals, and sporting events, I ensure the safety and well-being of the general public by providing valuable first aid services in high-pressure, fast-paced environments.

## Scout Group Leader

• Having been involved in Scouting from the age of five, I volunteer as a leader at my Scout group through organising activites at weekly meetings and various camps.

## **Direct Line Claims Handler**

• Resolved incoming calls from often distressed customers in an efficient and compassionate way while becoming well-accustomed to seeking help or advice when unsure of how to proceed.

# Skills

MATLAB, Simulink, Python, SolidWorks, Abaqus, STAR-CCM+, IAT<sub>F</sub>X, HTML, CSS, Excel Software Hardware Woodwork, Raspberry Pi, Arduino, PC building

Oct. 2020 - Aug. 2021

Jul. 2018 - Dec. 2018

May. 2019 - Present

Aug. 2016 - Present

Oct. 2020 - May 2021

Jan. 2022 - Present