MARCUS JONAS

mj16@princeton.edu | US: +1 (609) 285-8148 | UK: +44 (0) 7939940572

EDUCATION

Princeton University, Princeton, NJ, USA

SEP 2017 - MAY 2021

Senior, B.S.E. in Mechanical and Aerospace Engineering (MAE) with a certificate in Robotics. GPA: 3.542

Ashcroft Technology Academy, London, UK

SEP 2015 – JUNE 2017

A-level: Math (A*), Further Math (A*) and Physics (A*); AS-level: Chemistry (A).

Honoured for outstanding academic achievements in the London Borough of Wandsworth.

ENGINEERING EXPERIENCE

Headwaters Solutions LLC, Hector, NY, USA

MAY 2020 - AUGUST 2020

- Developed and solid modeled a new steam reformer unit in SOLIDWORKS that was presented to prospective clients.
- Co-created piping and valve estimation model used in client's pricing estimate.
- Successfully presented piping and instrumentation diagrams to client and held Q&A.

MAE Course Assistant, Princeton, NJ, USA

JUNE 2020 - AUGUST 2020

- Worked alongside a Princeton professor in preparing his course for a remote learning platform.
- Recorded CREO and technical tutorials for incoming students.

Princeton Cube-Satellite team, Princeton, NJ, USA

MARCH 2018 - MARCH 2020

- Worked to engineer and build a 3U Cube-Sat for testing a Princeton-built plasma hall thruster.
- Successfully collaborated with two members in designing and constructing a model of the thruster and nearby components for measuring insulating efficiency of an MLI blanket.
- Investigated how well direction sensors align with the magnetic field lines of earth using CAD to model the system.

Stiftung Solarenergie Philippines, Manila, Philippines

JUNE 2019 - AUGUST 2019

- Co-created the Water ACCESS program enabling distribution of clean water for domestic use in rural Filipino communities.
- Outlined detailed technical and community considerations for water system design.
- Built company website and implemented social media marketing strategy.

RELATED EXPERIENCE

Captain of the PU Men's Lightweight Rowing Team, Princeton, NJ, USA SPRING 2020 – PRESENT

- Organize the team schedule and practice times adapted to people's class times and coaches' availabilities.
- Represent the team body to the coaches and university athletics staff.

Tutoring and Teaching, London, UK

2012 - 2016

- Adapted teaching style and strategy to each individual student's abilities, strengths and weaknesses within subjects spanning from Mathematics to History to Spanish.
- Transferred knowledge through spoken language (both English and Swedish) as well as writing.

ATHLETIC ACHIEVEMENTS

PU Men's Lightweight Rowing Team, Princeton, NJ, USA

SEPTEMBER 2017 - PRESENT

- 1st place in the Lightweight Varsity 8+ at the Head of The Charles Regatta (19).
- Stroked the 1st Varsity 8+ to 2nd place at Eastern Sprints (18) and IRA Championships (18, 19).

Great Britain Junior Rowing Team, Poznan, Poland

JULY 2016 - AUGUST 2016

• Two-time gold medalist at the Coupe de la Jeunesse in the Junior Men's 4-.

SKILLS AND OTHER

- Proficient in CAD (CREO, SOLIDWORKS), MATLAB and Microsoft Office: Excel and PowerPoint.
- Advanced programming knowledge in Java (implementation of data structures and algorithms), proficiency in Python.
- SCORRE Leader (Strength in Coaching on Relationships, Respect and Equality).
- Bilingual in Swedish and English.