Melvin COSTA

ABOUT ME

Dedicated and analytical engineer with a strong background in physics, engineering, and complex system operations. Passionate about building, installing and optimizing complex machinery. I am particularly interested in hands-on work, assembly, calibration and qualification, with proficiency in Python and Matlab. My keen eye for detail and commitment to continuous learning drive me to excel in high-risk, high-reward scenarios.

CONTACT DETAILS

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PERSONAL INFORMATION

Citizenship: **India**

Visa: **Student permit**

Languages: **English** (C1/C2), **Swedish** (beginner)

SKILLS

- Python, Matlab, AutoCAD
- MS Word, Excel, PowerPoint
- Prototyping, Analytics
- Teamwork, Collaboration, Problem-Solving, EQ, Adaptable

EXPERIENCE

STUDENT AMBASSADOR at KTH (Stockholm) **2024.09–pres.**
◇ Contact with prospective students, organised webinars and tours.

RESEARCH INTERN at Uni. of the South Pacific (Fiji) **2023.05–2023.08**
◇ Conducted research, analysed experimental data and wrote a conference paper on "Performance of biodiesel in diesel engines."

SERVICE ENGINEER at FSL (Fiji) **2023.02–2023.05**
◇ Servicing and installation of electrical, plumbing and HVAC equipment. Produced comprehensive reports, estimates for tenders and logistics.

DESIGN ENGINEER Self-Employed (Remote) **2020.09–2021.08**
Worked as a freelance product designer and design engineer for startups and individual clients.
◇ Designed modular and interchangeable spice dispensing system of the cooking robot for **Mechanical Chef**.
◇ Designed and developed wireless charging system and interface of smart bio-medical testing equipment for **Panorama Labs**.

TUTOR (part-time) Self-Employed (Remote) **2020.06–2022.07**
◇ Taught high school level maths for about 2 years for about 10 hours a week. Prepared teaching material and quizzes.

CONSULTANT at Acernis (Remote) **2020.04–2020.09**
◇ Worked on a pilot project for migrating traditional network maps into a GIS system for a telecommunications client in Malta.

EDUCATION

MSc NUCLEAR ENERGY KTH (Sweden) **Expected grad. July 2025**
◇ Thermohydraulics, Sustainable Energy Technologies, Power Plant Simulations, Monte Carlo Methods, Deep Learning **GRADE: 4.71/5**

BSc AEROSPACE ENGINEERING TU Delft (Netherlands) **Grad. 2019**
◇ Control Theory, Modern Physics, System Design **GRADE: 7/10**

PG DIPLOMA CLIMATE CHANGE USP (Fiji) **Grad. 2022**
◇ Climate Change Science, Environmental Impact Assessment, Climate Change Adaptation **GRADE: 4.33/4.5**

PUBLICATION

◇ Costa, Melvin, et al. "Variation of power output from an OTEC power plant based on long-term sea surface temperature data analysis." *ASME International Mechanical Engineering Congress and Exposition.* Vol. 86687. American Society of Mechanical Engineers, 2022.

REFERENCES

JAN DUFEK Associate Professor at **KTH** (Sweden)
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