



# CAIDE SPRIESTERSBACH

ELECTRICAL & COMPUTER ENGINEER

## PROFILE

I am a motivated engineering graduate with a strong foundation in problem-solving, collaboration, and technical expertise. My academic journey honed my skills in mathematics and engineering design, while my professional experiences have equipped me to tackle complex challenges with efficiency. Beyond engineering, I am committed to sustainability and environmental conservation, consistently seeking opportunities to make a positive impact.

## WORK EXPERIENCE

### Student Volunteer

8-12 December 2024

IEEE Global Communications Conference

- Assisted with event coordination and supporting conference sessions.
- Engaged in discussions and gained insights on cutting-edge topics.
- Interacted with industry professionals
- Enhanced my understanding of the telecommunications field and deepened my passion for the space.

### Engineer in Training

November 2023 - December 2023

Bushveld Energy

- Designed and optimised a 200MW solar PV + Battery Energy Storage System (BESS) for the Vametco Mine, incorporating tracking solar panels for enhanced energy capture.
- Conducted research on Vanadium Redox Flow Batteries (VRFB) and utilised tools like AutoCAD, HOMER, PVSyst, and PVsyst for project mapping, economic analysis, and layout design.
- Integrated BESS for resilient power supply and evaluated financial viability to ensure sustainable energy solutions.

### Training Program Participant

16 November 2022 -

Cape Peninsula University of Technology

29 November 2022

- Participated in a comprehensive training program at CPUT.
- Technology exposure included: Welding, Turning, CNC Programming, Metrology, Pneumatics, Basic Hand Skills, and Robotics.
- Received a Testimonial Certificate upon completion.

## KEY ACHIEVEMENTS

- Awarded a distinction (81%) for final-year engineering project on microwave-assisted plastic pyrolysis for hydrogen production.
- Volunteered at IEEE Global Communications Conference 2024, contributing to its successful execution.
- Achieved a 80.33% aggregate in my final year.

## CONTACT

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## EDUCATION

2015 - 2016

HILTON COLLEGE

- Cultural Colours (Saxophone & Art)

2017-2019

BISHOPS DIOCESAN COLLEGE

- Achieved 5 distinctions
- Final Aggregate: 83.14%
- 1st XV Rugby

2020 - 2024

UNIVERSITY OF CAPE TOWN

- Cumulative GPA: 73.52%

## SOFT SKILLS

- Problem Solving
- Attention to detail
- Teamwork
- Adaptability
- Leadership
- Effective Communication
- Critical Thinking
- Confidence

## TECHNICAL SKILLS

- AutoCAD, KiCad, JetBrains
- Python, Java, C
- MATLAB, FEKO
- Raspberry Pi, Arduino, STM32 Discovery
- Microsoft Office