

# **Benjamin Keizer**

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902-218-6112

I am a reliable, hard-working, highly-motivated graduate in Sustainable Design Engineering with an interest in further pursuing CNN and AI applications in medicine and in the assistance of those with learning disabilities. I am a nationally certified sailing instructor who has developed excellent communication and team management skills. I am currently spearheading a volunteer project to establish a sailing program on PEI for those with physical disabilities, collaborating with municipal, provincial and national organizations including Paraspot PEI, Sail Able Nova Scotia, NB AbleSail and AbleSail Canada.

## **Research Skills**

- Supervisor to a 3<sup>rd</sup> year law student, Dalhousie University, Pro Bono Research Program
- Certification in Canadian ethical research practices consistent with the Tri Council Policy Statement: Course on Research Ethics Training
- Completion of independent study format, Fundamentals of Qualitative Research, Yale University
- Completion of independent study format in Convolutional Neural Networks for Visual Recognition, Stanford University School of Engineering
- Completion of independent study format in Project Management, Harvard Business School
- Creation, administration and analysis of a public survey approved by the UPEI Research Ethics Board
- Team-based research and design of five design projects, including an award-winning project adopted by the Royal Canadian Navy

## **B.Sc. Sustainable Design Engineering/ U.P.E.I. 2024**

### **4.0 GPA**

- 2023-2024 Designed a Machine Vision-Assisted trashcan and interactive display
- 2022-2023 Designed an Industrial Solar Array for Robertson Library, UPEI
- 2021-2022 Designed a Life-saving Device for the Royal Canadian Navy
- 2020-2021 Designed innovative Camping Facilities for Parks Canada
- 2019-2020 Designed pothole-resistant road pavement using recycled plastics

### **Awards**

Professor Don MacEwen School of Design Engineering Inspirational Award, 2024

CSME National Design Competition Sustainability Award, 2024

Engineering Technical Excellence Award, 2024

Clean Tech Award, 2024

UPEI Engineering Excellence Award, 2022

Robertson Accessibility Award, 2020, 2021, 2022

Work Integrated Learning Bursary, 2022, 2023, 2024

George Coles Bursary, 2019, 2020, 2021, 2022, 2023

Governor General's Academic Medal, 2019, Immanuel Christian School

Science Graduation Award, 2019, Immanuel Christian School

Math Graduation Award, 2019, Immanuel Christian School

Duke of Edinburgh Bronze Award, 2016

Black Watch Esprit de Corps Award, European Tour, 2014

UPEI Physics Award, 2012, Provincial Science Fair, PEI

## Work Experience

### 2023-2025

#### Instructor/ STEAM (Science, Technology, Engineering, Art, Math) PEI

Managed public electronics workshop, taught 3-D printing, designed and delivered learning modules in engineering design for children using LEGO, designed and delivered learning modules in the engineering design process for teenagers, and delivered in-school training in Cyber Security.

### 2022

#### Engineering Intern/Aspin Kemp & Associates

Researched hydrogen fuel cells for marine applications, constructed an electrical control centre for Summerside Solar Farm, industrial solar panel array.

- Fall Protection Training Certification (harness training)
- Shop Floor Safety Procedures Training

### 2021

#### Women's Sailing Program Instructor/Charlottetown Yacht Club

Taught women's beginner dinghy sailing lessons, including points of sail, wind direction, tacking, bearing off and heading up, how to use ticklers, on water safety and basic navigation.

## 2018-2021

### Junior Sailing Program Instructor/Charlottetown Yacht Club

Taught dinghy sailing to children ages 8 to 18 years, including points of sail, wind direction, tacking, bearing off and heading up, how to use ticklers, on water safety and basic navigation.

- Restricted Operator's License- Maritime Operator
- Standard First Aid AED CPR "C", St. John's Ambulance, Charlottetown, PEI
- Coach Boat Safety Training
- CanSail Instructor Training, Halifax, Nova Scotia
- CanSail Coaching Fundamentals, Halifax, Nova Scotia

## Interests, Activities, & Volunteer Work

### Volunteer work:

Founder and President, Canadian Association for Engineers with Disabilities, 2023 to present;  
Founder and Chair, Abegweit Ablesail PEI for the Physically Disabled, 2023 to present;  
High school: Peer tutoring in mathematics; teaching English as a Second Language; feeding elderly residents at The Mount Seniors Home.

### Interests:

Public transit enthusiast, urban planning, sailing, snowboarding, cricket (ODI), judo, international geopolitics, wildlife macrophotography, landscape painting, Canadian history.