Oliver White

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(403)971-5660
Oliver White

I am a highly curious, logical, and conscientious individual. I quickly pick up new skills, particularly in programming, software, and hands-on tasks. I am an excellent communicator with a multidisciplinary background and provide a calm grounding presence to my team. I am self-driven and proactive, being used to self-guided projects. I excel at tackling new problems with novel approaches.

EDUCATION

UNIVERSITY OF CALGARY

MSc Electrical Engineering
Thesis based
Extremely Low Frequency Detection for Biometric Sensing
Exp. Apr. 2023

BSc Physics
Minor in Nanoscience

BSc Natural Sciences
Double Conc.
Energy Science & Mathematics

SKILLS

PROGRAMMING

- Python
- MatLab
- Linux
- UNIX
- ImageJ Macro Language

SOFTWARE & FRAMEWORKS

- Keras
- Tensorflow
- SciPy
- Scikit-learn
- Altium Designer
- Pandas
- ImageJ
- LaTeX
- Swift
- Fusion 360
- KNIME
- CoreML
- Matplotlib
- Git

ACADEMIC EXPERIENCE

- Machine Learning
- Image Processing and Analysis
- Signal Processing and Analysis
- Biometric Systems
- Optical Instrumentation
- Computational Physics
- Advanced Laboratory Physics

AWARDS

- Alberta Graduate Excellence Scholarship (AGES-M)
- Male Student-Athlete Award
- SSE First Year TA Award
- Dinos & CanWest Rugby MVP

EXPERIENCE

BLIQ PHOTONICS | Machine Learning Specialist

May 2021 — Sept. 2021 | Remote: Calgary, AB | Quebec City, QC

- Worked with TensorFlow, Keras, and CSBDeep to train and test deep learning models for denoising and reconstructing low SNR single-photon microscopy images.
- Used Swift to convert models into applications usable on iOS for implementation into Bliq's software product library.
- Aided with 3D stitching images from very large data sets.

LIVE CELL IMAGING LAB | Image Analysis Specialist

May 2020 — Aug. 2020, Jan 2022 — Apr. 2022 | Calgary, AB

- Helped biologists with unique problems concerning their research, and designed solutions to automate and streamline their image analysis.
- Continued my Senior Physics Research Thesis post-graduation, working on automating image processing for quantitatively scoring mitochondrial networks.
- Worked in ImageJ using ImageJ macro language (ijm) to produce an image segmentation pipeline capable of automatically scoring images of mitochondrial networks.

SPECTRAL AEROSPACE | Optics & Instrumentation

Dec. 2018 — Jan. 2020 | Calgary, AB

- Wrote scripts in MatLab to accurately model and display the optical cavity and behavior of light in a hyper-spectral satellite.
- Researched applications of spectral data for various sectors.
- Attended several local conferences in innovation and technology and connected with people from the Agricultural sector on how spectral data could aid farmers and environmental specialists.
- Worked with a team in Australia, gaining experience in efficient remote collaboration.

TEACHING & VOLUNTEERING

TEACHING ASSISTANT | University of Calgary, Dept. of Electrical Engineering

Sep 2020 —Apr. 2023 | Calgary, AB

- TA for ENGG 225 Intro to Circuits and Machines, received SSE First Year TA award.
- TA for ENEL 514 Introduction to Nanotechnology.
- TA for Integrated Imagers and Micro-Nano Sensory Systems course.

TUTORING | Math Tutor

June 2019 —Nov. 2020 | Calgary, AB

ENGLISH TEACHER & LABOURER | IVHQ

Jan 2014 – Feb 2014 | Cusco, Peru

RAINFOREST CONSERVATION | IVHQ

Feb 2014 | Rio Madre De Dios, Peru