

Joshua Himmens

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ATLAS Deep Learning Research Student at TRIUMF

Undergraduate Engineering Physics Student at The University of British Columbia

Experience

ATLAS Deep Learning Research Student

TRIUMF | Summer 2024

- Developed panoptic segmentation models for the ATLAS detector using the PointNet ML framework with Wandb, TensorFlow, Keras
- Used CERN's grid computing to parallelize compute across thousands of nodes.

Command and Data Handling (CDH) Lead

UBC Orbit Satellite Team | 2024 - Present

- Led the CDH team to develop software to meet mission and testing objectives from ESA (European Space Agency) for the ALEASAT project
- Managed a team of 10
- Presented to ESA in Belgium on project status
- Developed mission testing, function testing, and acceptance testing procedures.

Embedded Firmware Developer

UBC Orbit Satellite Team | 2023 - Present

- Programmed device drivers, electrical ground support equipment (EGSE)
- Developed the ALEASAT Avionics Test Bench (FlatSat)
- Worked on the ALEASAT onboard computer for launch in Q1 2026.

Curriculum and Advocacy Director

UBC Engineering Undergraduate Society | 2024 - Present

- Worked with the faculty and the undergraduate society to develop multi-year plans for coop-related advocacy
- Advocated for transparency in coop fee use in line with standards at other institutions.

Advisory Team Member

Child Rights Connect | 2021 - 2023

- Provided guidance to UN delegations on communication strategies for high-level rights goals
- Presented to governments and consulted on international initiatives to support the UN Convention on the Rights of the Child.

Correspondent

Organization of American States | 2019 - 2020

- Created content on human and child rights
- Attended international conferences representing Canada
- Attended the 3rd Pan American Child and Youth Forum in Cartagena, Colombia with the Government of Canada.

Education

Publications

Technical Skills

Awards



Erich Vogt First Year Summer Research Experience (FYSRE) award | 2024

Awarded for exceptional research in the field of physics.

Tom Lawson award for embodying the spirit of Canadian debate | 2023

Awarded for embodying the spirit of Canadian debate.

Alberta Premier's Citizenship Award for outstanding community service | 2023

Awarded for outstanding community service.

Calgary Flames Foundation Community Involvement Scholarship | 2023

Awarded for community involvement.

Julia Turnbull Leadership Award for exceptional community service | 2023

Awarded for exceptional community service.

Ted Rogers Entrance Scholarship for academic achievement | 2023

Awarded for academic achievement.

Other

National Debate Semi-Finalist, Canadian National Style, 2023.