

Professional Experience

- Mauka Energy Inc & Mauka Forestry Inc**, Corvallis, Oregon & Vancouver, BC August 2023 - present
CTO, CFO, Founder
- Geospatial mapping services and technology development for electric vehicles
- Oregon State University, Faculty of Forestry**, Corvallis, Oregon September 2021 - present
Sessional lecturer
- Forest Operations and policy issues
- Graduate Teaching assistant**
- Forest Road System management
 - Linear, Nonlinear & Dynamic programming
 - Logging Mechanics
 - Harvesting operations
- SBS Forestry Inc, Takla Nation**, Prince George, BC June 2022 – September 2022
Senior Forester and project manager assistant
- Forest harvest planning and project management
 - Managed helicopter & float plane layout projects
- UBC Alex Fraser Research Forest, Faculty of Forestry**, Williams Lake, BC August 2018 – January 2021
Assistant Operations Supervisor
- Supervised forest harvesting operations, planning, and layout design
 - Managed the AFRF GIS database and assisted with network & IT support
- UBC Malcolm Knapp Research Forest, Faculty of Forestry**, Maple Ridge, BC April 2018 – August 2018
Research Assistant
- Performed field work, research assistance and fire patrols
- University of British Columbia, Faculty of Forestry**, Vancouver, BC September 2017 – April 2019
Graduate and Undergraduate Teaching Assistant
- Spring field school (graduate & undergraduate TA)
 - Forest surveying & road development (graduate & undergraduate TA)
 - Introduction to forestry (graduate TA)
 - Forest economics (graduate TA)
 - Forest harvesting systems & operations (undergraduate TA)
 - Computer applications in forestry (undergraduate TA)
- Pioneer Forest Consultants Ltd., Layout Division**, Golden, BC May 2017 – August 2017
Forest Engineer
- Engineered Interior cable & ground-based cut blocks and roads
- Chartwell Consultants Ltd., Forestry Division**, North Vancouver, BC May 2016 – December 2016
Junior Forest Engineer
- Engineered coastal cable cut block layout and road layout
- West Fraser, Woodlands Division**, Quesnel, BC May 2015 – August 2015
Forest Technician
- Engineered interior ground-based cut blocks and road layout
- Cariboo Forest Consultants**, Quesnel, BC May 2014 – August 2014
Forest Technician
- Cut block layout and road layout, silviculture plots & timber cruising
- May 2013 – August 2013

Education

OREGON STATE UNIVERSITY, Faculty of Forestry, Corvallis, OR 2021 - present
PHD student in Forest Engineering & Sustainable Forest Management

UNIVERSITY OF BRITISH COLUMBIA, Faculty of Forestry, Vancouver, BC
Masters of Geomatics and Environmental Management Graduation Date: 2019
Bachelor of Science in forestry: forestry resource management, major (Co-op) Graduation Date: 2018

Patent & Publications

Forestry Electric Vehicle Energy Routing Tool (FEVER) July 2023
United States Patent Application Number 18/349569

The FEVER tool and methodology arose out of research by David Hamilton at Oregon State University (OSU). In 2023, OSU prepared and filed a United States non-provisional patent application (number 18/349,569) to secure the core technology.

International Journal of Forest Engineering, Open Access, peer-reviewed, **first author**
Submitted November 2023

- A Forestry Electric Vehicle Energy Routing and Mapping GIS Tool

Croatian Journal of Forest Engineering, Open Access, peer-reviewed, **third author** Accepted
• Breakeven Analysis Considering Ultra-Fast Charging Stations at Mills for Battery-Electric Log Trucks.

PLOS ONE, Open Access, peer-reviewed, **second author** Published September 14, 2022
• [Combining aerial photos and LiDAR data to detect canopy cover change in urban forests.](#)

ABC FP, Professional Forester Magazine Publication, **first author** Published June 17, 2020
• [Alex Fraser Research Forest interior Douglas-fir beetle 2020 update](#)

Certification and Training

2023 OSU Advantage Accelerator
2022 Forestry Field Safety Training with Jim Kiser
2021 OSU Van Safety Training
2016 First Aid level 1 (updated 2022)
2015 S-100A basic fire suppression and safety certification
2015 Emergency spill clean-up procedures course (Brent Graham Ltd. environmental services)
2015 Occupational first aid transportation endorsement (expired 2021)
2010 Valid class 5 BC driver's license
2001 BC boat licence

Volunteer Experience and Extra- Curricular Activities

OSU Forestry Graduate Student Council, Corvallis, OR
Social Chair September 2021 – present

Forestry Undergraduate Society, Vancouver, BC
Canadian Institute of Forestry - Student Liaison February 2017 – April 2018

OSU Logger Sports, Corvallis, Oregon 2021 - present
UBC Logger Sports, Vancouver, British Columbia 2017 – 2019