

technical skills

- Class 5 Drivers License
- MS Excel, Word, Teams
- SharePoint, Obsidian
- data visualization
- database management

transferable skills

- service-oriented
- interpersonal-communication
- problem identification
- conflict resolution
- information presentation

coding languages & tools

- python
- java
- HTML
- SQL
- Git

work experience

scientific & technical project work

- 2022** **Telescope Data Assistant** - Gemini South, Noirlab, La Serena, Chile
object-oriented code de-bugging, code feature designs, operations planning & review, international collaboration, real-time problem solving, maintain databases, develop work-flows
Project: Preparing a New, World-Class Spectrograph for Operation and Data Processing
Supervisors: Dr. Steve Margheim, Dr. Alan McConnachie
- 2021-2024** **Graduate Researcher** - University of Victoria, BC
project management, data & errors analysis, conference presentations, document procedures
Project: Secrets of the Early Universe from Spectroscopic Analyses of Ancient, Extra-Galactic Stars
Supervisor: Dr. Kim Venn
- 2020-2021** **Undergraduate Research Assistant** - University of Victoria, BC
data management & analysis with Python, writing, editing, & re-purposing code
Project: Milky Way Origins from Chemical & Dynamical Analyses of Rare Stars in Galactic Core
Supervisor: Dr. Kim Venn
- 2018** **Undergraduate Co-op Research Assistant** - Dominion Astrophysical Observatory, Victoria, BC
self-directed learning, research, code development, conference presentation
Project: Finding Extra-Solar Planets Using Python to Simulate Radiation and Planetary Effects
Supervisor: Dr. Sam Lawler

related scientific & technical work

- 2021-2022** **Laboratory Instructor**, Physics and Astronomy Dept., University of Victoria
collaborative lesson-planning, time-management, science communication, administration
- 2021** **Technical Operator** - Stellar Seminars, online public astronomy talks, UVic
technical zoom support, speaker coordination, recording file management
- 2020-2021** **Public Educator** Weekly Astronomy Open House, UVic
science communication, public engagement, information synthesis

service work

- 2024** **Note-taking** - Allies in Action Event Series for Older LGBTQ+ Persons
- 2024** **Non-Profit Outreach Ambassador** - Capital Bike. *event planning, volunteer coord., administration*
- 2019-2020** **Grocery Supervisor** - The Root Cellar Village Green Grocer
- 2016-2018** **Barista** - Starbucks
- 2013-2016** **Orchestral Tuba Player** - Prince George Symphony Orchestra & Vancouver Island Symphony

workshops

- 2022** **Indigenous Cultural Acumen Training (ICAT)** - First Peoples' House, UVic

volunteering

- 2024 **Set-up & Clean-up Volunteer** - Tour de Victoria
- 2024 **Volunteer Coordinator** - Victoria Pride Society
- 2024 **Clean-up Volunteer** - Oaklands Community Center
- 2023-2024 **Operations Volunteer & Driver** - Community Food Support Mutual Aid
- 2023 **Instructor** - Queer Crafternoon art drop-in
- 2022 **Event Planner** - Physics and Astronomy Graduate Student Association
- 2022 **Moderator** - Queer Housing Victoria Facebook Group
- 2021 **Code of Conduct Writer** - Undergraduate Physics and Astronomy Course Union, UVic
- 2020 **Land-Acknowledgement Writer** - Undergraduate Physics and Astronomy Course Union, UVic
- 2020-2021 **Administrator** - Undergraduate Physics and Astronomy Course Union, UVic
- 2018-2019 **Tutor** Horizons Math & Language Tutoring, UVic
- 2017 **Organizer** Music Discoveries Day Camp for middle-school students, UVic
- 2012-2018 **Masterclass Leader** Middle School Band Outreach

Publications

- 2022 **Waller, Fletcher;** et al. published Dec. 13, 2022
The Cosmic Hunt for Members in the Outskirts of Ultra Faint Dwarf Galaxies: Ursa Major I, Coma Berenices, and Boötes I
MNRAS, arXiv:2208.07948.
- 2022 Sestito, Federico; et al.
The Pristine Inner Galaxy Survey (PIGS) V: a chemo-dynamical investigation of the early assembly of the Milky Way with the most metal-poor stars in the bulge I
MNRAS, arXiv:2208.13791.
- 2022 Hayes, Christian R.; **Waller, Fletcher;** et al.
The Gemini-South High-Resolution Optical Spectrograph (GHOST) data reduction system
SPIE, doi:10.1117/12.2642905.
- 2022 McConnachie, Alan W.; Hayes, Chris; Ireland, Michael; **Waller, Fletcher;** et al.
Science commissioning and first results from the next generation Gemini High Resolution Optical Spectrograph (GHOST)
SPIE, doi: 10.1117/12.2630407.

education

- 2024 **MSc**, Astronomy, Research Thesis - University of Victoria **Advisor:** Dr. Kim Venn
- 2020 **BSc**, Physics and Astronomy, - University of Victoria. 8 months of co-op work experience
- 2014-2016 **BMus**, Music Education & Performance (incomplete), - University of Victoria, BC

teaching experience

- 2023 **Crochet Facilitator**
Monoceros Education Society
- 2021-2022 **Lab Instructor**, Physics and Astronomy Dept., University of Victoria
Phys 110, Astr 101
- 2020-2021 **Public Educator** Weekly Astronomy Open House, UVic
science communication, public engagement, information synthesis
- 2018 **Tutoring**, Horizons
math & writing, ages 11-17
- 2012-2017 **Brass Musical Instrument Instructor**, middle- and elementary-schools, private lessons
tuba, trombone, baritone

conferences & presentations

- 2024** **Trans Day of Remembrance** Legislature Buildings, Victoria, BC
Invited Address: Three Oranges: A Story of Trans Love and Loss
- 2024** **2SLGBTQ+ in STEM** 5th Annual, Regina, SK
Keynote Address: In a Galaxy Near Nearby: Detecting Traces of Ancient Supernovae Using High-Resolution Spectroscopy
- 2023** **International Astronomical Union** Symposium 379 "Dynamical Masses of Local Group Galaxies"
Potsdam, Germany
Poster: The Cosmic Hunt for Members in the Outskirts of Ultra-faint Dwarf Galaxies
- 2023** **American Astronomical Society** Winter Meeting AAS241 - Seattle, WA
Poster: The Cosmic Hunt for Members in the Outskirts of Ultra-faint Dwarf Galaxies
- 2022** **Society of Photo-Optical Instrumentation Engineers** SPIE 2022 - Montreal
Poster: The Gemini-south High-resolution Optical SpecTrograph (GHOST) data reduction system
- 2022** **Canadian Astronomical Society** CASCA 2020, 2021, 2022 - remote
Poster: New Members in the Outskirts of Ultra-Faint Dwarf Galaxies
- 2021** **Poster:** GRACES Hi-Res Spectroscopic Chemical Abundances in Ultra-Faint Dwarf Galaxies
- 2020** **Poster:** Gemini GRACES spectra of extremely metal-poor stars in the Galactic Bulge
- 2018** **Astronomy NWxSW**, UBC
Talk: Dynamical Simulations of Fomalhaut's Dust Ring with CANFAR and REBOUND

honors and awards

- **2021-2022, Graduate Award, University of Victoria**
- **2020, USRA, University of Victoria**
- **2019, Miranda Ward Physics Award, University of Victoria**
- **2016-2020, Odd Fellows Bursary, University of Victoria**
- **2015, Mary M. Erich P. Schwandt Award, University of Victoria**
- **2014, University of Victoria Entrance, University of Victoria**

interests

creativity

- crochet
- needle felting
- sewing

activity

- cycling
- outdoor swimming
- yoga

sustainability

- gardening
- food preservation
- habitat restoration

Active Member of:

- **Queer Crafternoons**, a free drop-in art space for queer, trans, and two-spirit folks of all ages
- **Tongues of Fire** by Victoria Poetry Project, the longest-running poetry open mic on lək̓ʷəŋən territory
- **Greater Victoria Concert Band**