

# Jessica Peters

778-926-5622 | Calgary, AB | [jessica@jessicapeters.ca](mailto:jessica@jessicapeters.ca) | [linkedin.com/in/jessicawpeters](https://www.linkedin.com/in/jessicawpeters)

Software developer with physics and environmental background.  
**Let's build a future we all want to live in.**

## SKILLS

**LANGUAGES:** Python, JavaScript, jQuery, HTML/CSS

**TECHNOLOGIES:** SVN, NumPy, Pandas, Matplotlib, Plotly, Silk Test

**WORKING KNOWLEDGE OF:** GitHub, SQL, relational databases, .NET, Flask, Ruby, Rails

## EXPERIENCE

### Software Developer

Feb 2017 - May 2021

### CONVERGENT MANUFACTURING TECHNOLOGIES

Vancouver, BC

**Tech stack:** Python, NumPy, Pandas, Matplotlib, Plotly, Flask, JavaScript, jQuery, HTML/CSS, SVN

- Developed computational modelling, data visualization and UI/UX components for composites process modelling software suite used by major aerospace contractors
- Participated in product architecture design for the next major version (V4) of software suite with guidance and mentorship from principal engineers; provided valuable input around architectural issues in the existing, legacy code (V3)
- Designed and implemented large portions of the V4 GUI and plotting functionality
- Analyzed results of the V3 automated test suite and triaged failures into 1) issues with test code or 2) issues with product code; fixed test code and filed bug reports as appropriate

### Key Projects:

- **V4 Plotting:** Generalized plotting module which provides data visualization in interactive multidimensional plots, while freeing development from being locked into using a particular plotting library and GUI framework. I designed and built the back-end and large portions of the desktop and web front-ends, and worked on the API implementation
- **1D Thermal Profile App:** Enables the user to set up a 1D "drill-through" simulation of a composite material as it cures, and view plots of simulation results, via desktop app or web app. I worked on the desktop and web front-ends
- **Parametric Study App:** Allows the user to enter parameter values for many finite element simulations at once, and choose which plots they want to see. It processes the output data, generates and displays the requested plots. I designed and built the UI, and worked on data processing and data visualization
- **T Dynamic Template:** Generates a mesh for simulating a T-shaped assembly based on user inputs, and formats the mesh and other input data for the finite element analysis engine. I was responsible for mesh generation, data formatting, updating the UI, and integrating the new template into the legacy codebase

**Software Developer (Internship)**  
**SWIFT FOX SYSTEMS**

Aug 2016 - Nov 2016  
Vancouver, BC

**Tech stack:** JavaScript, jQuery, HTML/CSS, MySQL, GitHub

- Gathered requirements, wrote functional spec and built standalone functional prototype for scheduling module which manages ISP technicians' work schedules and service call bookings

**Ground Water Scientist (Contract)**  
**ENVIRONMENT CANADA**

Jan 2012 - May 2012  
Vancouver, BC

- Collected, processed, cleansed and visualized groundwater data
- Managed Environment Canada's regional groundwater monitoring network
- Sampled groundwater and measured water levels in Abbotsford-Sumas Aquifer
- Operated datasonde and multilevel dialysis-cell samplers
- Uploaded hundreds of files to SharePoint server, adding descriptions, titles, and keywords

**PROFESSIONAL DEVELOPMENT**

**Microsoft Power Platform App in a Day**

2021

**FIDELITY FACTORY** 1-day workshop on Power Apps, Microsoft Dataverse and Power Automate

**Climate Change for Software Engineers**

2021

**TERRA.DO** 5-week crash course on climate science and software solutions

**EDUCATION**

**Diploma of Web Development**

2016

**LIGHTHOUSE LABS WEB DEVELOPMENT BOOTCAMP**

Vancouver, BC

**Diploma of Technology in Environmental Protection**

2011

**KWANTLEN POLYTECHNIC UNIVERSITY**

Richmond, BC

**Bachelor of Science in Physics**

2007

**DALHOUSIE UNIVERSITY**

Halifax, NS

**VOLUNTEER WORK**

**Refugee Resettlement**

Calgary, AB | 2022 - Present

- Co-led emergency housing setup and hosting of Ukrainian refugee families, provided orientation to Canadian daily life, offered support to ensure smooth transition and integration

**FreFlo**

Calgary, AB | 2022 - Present

- Provided ground support for microwave link alignment; terminated CAT5 network cables

**Anvi Project**

Calgary, AB | 2021

- Tested, sorted and packed used wireless internet equipment for shipping to developing nation where hardware availability is a major barrier to affordable internet access