

Program Instructor, Invent the Future

Duration: 1 to 3 weeks between July 10th, 2023 to July 28th, 2023

Commitment: Monday to Friday; up to 20 hours a week

Reports to: Coordinator, Outreach Programs and Program Lead, Invent the Future

Stipend: \$220 + weekly stipend = Up to a total of \$1500; please refer to the 'Time Commitment' chart below for weekly stipend amounts.

Work location: This is a remote position.

Background

SFU Applied Sciences Outreach (with Science ALIVE) strives to engage youth in hands-on STEAM (Science, Technology, Engineering, Art & Design, Mathematics) programs to build measurable skills and improve self-confidence. Aligned with the SFU Faculty of Applied Sciences' mandate, we aim to dispel stereotypes in the field of science and engineering and work towards achieving diversity and inclusion. We work to empower those traditionally under-represented groups in STEAM by developing barrier-free programs for girls, at-risk youth, and Indigenous communities.

Invent the Future is a three-week summer enrichment program for trans and cisgender women, non-binary and Two Spirit students in Grade 9-12 hosted by Simon Fraser University. During this online program, students will explore the world of AI through team projects and connecting with mentors and industry experts in a supportive yet challenging environment.

About the Role

The Program Instructor ("Instructor") reviews the program curriculum and prepares additional lectures, tutorials, practice problems, and discussions, if necessary. They serve as the point person for all learning materials and activities for the program, communicate learning objectives, lead code-along workshops, and assess students' learning and progress with their group projects. Potential project topics include computer vision, natural language processing, robotics, and computational biology. Instructors will also be responsible for providing additional support during office hours. They will also coach and provide guidance to 1-2 teaching assistants who are program alumni.

Responsibilities include, but are not limited to:

- Review program curriculum and prepare additional lectures, tutorials, practice problems, and discussions, if necessary;
- Serve as the point person for all learning materials and activities;
- Prepare presentations to communicate learning objectives and lead code-along workshops;
- Assess students' learning and progress with their group projects;
- Provide educational support to students during office hours;
- Build a strong and healthy learning community that enhances participant academic progress and success.

Time commitment

Instructors must be available for at least one week during the program dates (i.e. July 10-28, 2023) and be present for mandatory orientation and meetings.

Description	Details	Stipend	Status
Orientation & onboarding	<ul style="list-style-type: none"> Mid April 2023 1.5 hour meeting 	\$220 upon completion of all 4 items and the final project presentation (July 28th)*	Mandatory
Mid-season check-in	<ul style="list-style-type: none"> Mid May 2023 30 minute meeting 		Mandatory
Meet with alumni TAs	<ul style="list-style-type: none"> Early June 2023 1.5 hour meeting 		Mandatory
Final team meeting	<ul style="list-style-type: none"> Mid June 2023 1.5 hour meeting 		Mandatory
ITF 2023 Week 1	<ul style="list-style-type: none"> July 10-14, 2023, 8:45 am-1 pm PST (~4 hours/day) Topics covered in Week 1 include data exploration, wrangling, and visualization and clustering. Instructors are required to lead code-along workshops on these topics and prepare supplemental learning materials if necessary. Instructors are required to review students' projects and provide feedback at the end of the week. 	\$440	Must commit to at least one of the three weeks
ITF 2023 Week 2	<ul style="list-style-type: none"> July 17-21, 2023, 8:45 am-1 pm PST (~4 hours/day) Topics covered in Week 2 include classification, probability and naive bayes, and regression. Instructors are required to lead code-along workshops on these topics and prepare supplemental learning materials if necessary. Instructors are required to review students' projects and provide feedback at the end of the week. 	\$440	
ITF 2023 Week 3	<ul style="list-style-type: none"> July 24-28, 2023, 8:45 am-1 pm PST (~4 hours/day) Week 3 will cover evaluation metrics for AI algorithms. Instructors are required to lead a code-along workshop on this topic and prepare supplemental learning materials if necessary. Instructors are required to review students' projects and provide feedback as well as help students wrap up their projects and prepare for their final presentation. 	\$400	
Final project presentation	<ul style="list-style-type: none"> July 28, 2023, 9 am-12 pm PST Attend the final project presentation and graduation ceremony to support your students. 	See (*) above	Mandatory
Total:		\$1500	

What we are looking for

- Currently an SFU undergraduate or graduate student in computer science;
- Completion of coursework (undergraduate or graduate) in artificial intelligence-related topics is required;
- Summer camp/program experience or experience working with program participants ages 14–17 is desirable;
- Creative and positive attitude, and enthusiasm for working with high school program participants;
- Demonstrated leadership and mentorship skills;
- Enjoy working in a collaborative setting and engaging in continuous learning.

To apply

Please submit your application [here](#) by **March 13th, 2023 (11:59 PST)**. If you have questions, please feel free to contact Eva at sacoord@sfu.ca.

SFU Applied Sciences Outreach (with Science ALIVE) respectfully acknowledges the xʷməθkʷəy̓ əm (Musqueam), Skwx̣ wú7mesh Úxwumixw (Squamish), sə́ ilw̓ ətaʔt (Tsleil-Waututh), ǵ íć əy̓ (Katzie), kw̓ikw̓əł̓ əm (Kwkwetlem), Qayqayt, Kwantlen, Semiahmoo and Tsawwassen peoples on whose unceded traditional territories our three campuses reside.