

## **Research in Technology Fellowship (RTF) – An Industry Sponsored Research and Work Experience Opportunity for UNBC Students**

### **Guidelines**

The Research in Technology Fellowship was established in collaboration with TeejLab Inc. to provide Research and Development (R&D) opportunities for two UNBC students who are interested in technology related research. This is an opportunity for students to be involved in a combination of research and internship activities where they will earn valuable experience while working with Research Engineers from TeejLab. It also provides an opportunity for faculty members to mentor UNBC students in areas of technology related research. **This fellowship is co-sponsored by UNBC and TeejLab Inc. and each application should demonstrate how the student researcher will address an industry challenge related to technology, cybersecurity, or data privacy, security and integrity.**

Two fellowships of **\$5,000 each** will be provided to the successful students to work on specific industry problem(s) provided by TeejLab Inc.

**Term of Award: December 7<sup>th</sup>, 2020– August 27<sup>th</sup>, 2021**

**The objectives of this program are to:**

- Nurture talent at UNBC (both graduate and undergraduate);
- Offer industry exposure and solve real world problems – adds to student’s resume;
- Create closer link and ongoing relationship between UNBC and industry – academic and industry mentors together help to solve real word problems;
- Provide UNBC students with the opportunity to get involved in research relevant to the technology sector – in particular cybersecurity;
- Encourage their critical and creative thinking and inquiry;
- Enhance their understanding of the processes of knowledge creation;
- Develop their skills to design and/or carry out a project;
- Prepare them for the workforce;
- Improve their communication skills (written, oral, visual).

**Please note:**

- While the student may contribute to the research/academic project during this fellowship, the emphasis is on the quality of industrial training that the student is expected to gain during the fellowship;
- The RTF program is not intended to duplicate other research experiences, such as honours programs or independent/directed studies. RTF student award holders cannot be receiving a course grade for the research for which they are being funded in the semester of the award;
- To involve as many students as possible, a student may receive only one RTF during their career at UNBC.

### Who may apply?

- 'Full-time' UNBC undergraduate or graduate students (enrolled in a minimum 9 credit hours during the semester of the RTF), who will have completed 30 credit hours at the time of the award;
- Students from any discipline who are interested in technology related research are encouraged to apply.

### Support available:

- Two Fellowships of \$5,000 will be provided to the students for the period of time specified above;
- The Fellowship value will be paid out to the students bi-weekly over the duration of the fellowship;
- It is expected that the students will dedicate a minimum of 300 hours to the research activity over the term of the Fellowship;
- TeejLab will identify one or more people from the company that will provide mentorship and support to the student on the project;
- Up to \$1,500 of additional support from UNBC may be available for travel costs to a research site.

### Undergraduate research/scholarly activity experience activities may include (but are not limited to):

- working on research design;
- data collection;
- data analysis;
- participation in the production of a creative work, informed by research;
- knowledge mobilization/knowledge transfer activities.

### Criteria for selection of project:

- **quality of research proposal based on the following topics: Application programming Interface (API); API security; API authentications; API economy; API management, and similar topics related to APIs. Students need not have any prior experience in these topics, but their proposal should demonstrate some creativity and understanding about APIs.** Visit <https://apidiscovery.teejlab.com/> for more information on APIs;
- potential richness of research experience for the undergraduate student;
- clear expectations for learning outcomes.

### Criteria for selection of student:

- academic record of student;
- lack of previous opportunities for involvement in supervised research in a university setting;
- commitment to providing a summary of their research experience and short presentation of their work (see 'Commitments and Expectations', below);
- statement (max. 500 words) written by the student regarding how this opportunity will benefit the student's learning experience.

### **Commitments and Expectations:**

- The student will work directly with TeejLab team for a specific number of hours as per the RTF program;
- Student will commit to providing a short (2-3 page) report on research activities they engaged in, including title and 'abstract' (max. 200 words) of the research pursued, outcomes of the project, and assessment of experience;
- In the assessment of the experience students are encouraged to reflect on their learning and in particular are asked to respond to the following questions:
  - 1) Did the experience enhance your research skills? Please explain your response;
  - 2) Did the experience enhance your understanding of the research process? Please explain your response;
  - 3) Did the experience enhance your overall educational experience at UNBC? Please explain your response;
- A digital picture of the student, especially involved in the research, is much appreciated;
- The title, abstract, picture (if available) and summary report may be used on the Office of Research or other UNBC websites and potentially in university newsletters and publications;
- The summary report is due to the Office of Research within two weeks of completing the RTF
- Student and faculty member will commit to completing a short evaluation of the RTF which will be used for ongoing program evaluation processes.

### **Process:**

- The RTF will be announced both to faculty members and students at the beginning of each term. Students should approach faculty members to seek guidance. Faculty members should encourage their students to apply. Students can also contact the Office of Research for general guidance at [research@unbc.ca](mailto:research@unbc.ca);
- The student will review the terms of reference and then complete the form. A single PDF version of this application is to be submitted to: [research@unbc.ca](mailto:research@unbc.ca). The file name should use the following format: LASTNAME\_RTFAplication.PDF
- The best applications will demonstrate a strong alignment with the objectives of the RTF as noted above;
- The Adjudication Committee will be provided with the applications within 24 hours of the submission deadline; a meeting will be convened in order that results can be announced within a week after the submission date;
- The successful applicants will be notified by e-mail.

### **Application Deadline: November 15<sup>th</sup>, 2020**

#### **Research in Technology Fellowship Selection Committee:**

An adjudication committee will be chaired by the Director of Research and will include at least one faculty member from computer science, mathematics, or physics, appointed by the Dean of CSAM. Members of the adjudication committee will have a solid record of both conducting research and mentoring students.

If you have any questions regarding the award or award process, please contact Mark Barnes, Director, UNBC Office of Research, at [mark.barnes@unbc.ca](mailto:mark.barnes@unbc.ca).