

# Bryan-Elliott Tam

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Computer Engineer with a Mechanical Engineering background and keen interest in Web Technologies and Formal Methods.

## SKILLS

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- **Programming Languages:** TypeScript, Prolog, Rust, Python, Go, HTML/CSS, SMT-LIB, C++
- **Technologies:** Linux, SPARQL, RDF, Svelte, Vue.js, React, Docker, Z3, MongoDB, Neo4j, PyQt, MQTT, Node-RED
- **Natural Languages:** French, English

## WORK EXPERIENCES

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**Search Engine Developer (Research Assistant)** May 2022 — September 2022  
Université Laval *Sainte-Foy, Qc, Canada*

Developed a custom search engine to support architecture researchers in retrieving relevant literature, using Go, Python, and JavaScript.

**Localization Systems Developer (Research Assistant)** May 2020 — September 2020  
Université Laval *Sainte-Foy, Qc, Canada*

Transformed a 2D excavator localization system into a 3D solution, increasing positional accuracy by integrating map data and turret orientation; developed using C++ and Python.

**IoT and Web Developer** October 2018 — March 2020  
Systèmes Vireo *Sainte-Foy, Qc, Canada*

Designed and deployed an IoT system for managing hydroponic components in an urban agriculture startup, combining embedded systems (C++, PlatformIO, MQTT, KiCad) with full-stack development (React, TypeScript, Node.js, REST/GraphQL APIs, MongoDB, Node-RED); also led on-site installation and testing.

**IoT Developer (Intern)** May 2018 — August 2018  
Systèmes Vireo *Sainte-Foy, Qc, Canada*

Designed electronic systems for hydroponic applications, including schematic design with KiCad and development of a management interface using Python and PyQt.

## EDUCATION

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**Universiteit Gent** 2022 — Present  
*Doctorate, Computer Science Engineering* *Gent, Belgium*

- Research Topic: Decentralized Web Querying of Knowledge Graphs Databases
- Additional Responsibilities:
  - Teaching assistant for the Knowledge Graphs course
  - Member of the program committee for the [SEMANTiCS 2025 Developers Workshop](#)

**Université Laval** 2020 — 2022  
*Master of Sciences, Computer Science* *Sainte-Foy, Qc, Canada*

- Thesis topic: Digital Twin to Improve Training and Performance of Forestry Operators

**Université Laval** 2015 — 2019  
*Bachelor of Engineering, Mechanical Engineering* *Sainte-Foy, Qc, Canada*