

GIANCARLO PERNUDI SEGURA

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SKILLS

- Programming Languages: Python, Java, JavaScript, C, Assembly (RISC-V), Bash and SQL.
- Frameworks and environments: Git, React, Vue, Android Studio, TensorFlow Keras, and UNIX.
- Behavioural Competencies: cognitive thinking skills, communication, and teamwork.

EDUCATION

University of Alberta

BSc Specialization in Computing Science

Edmonton, AB

Sep 2019 - Apr 2023

- **Related Coursework:** Computer Organization and Architecture, Introduction to Software Engineering, Practical Programming Methodology, Intelligent Systems, Reinforcement Learning.
- Dean's Honor Roll (2021, 2019)
- Jason Lang Scholarship (2021, 2020, 2019)

EXPERIENCE

University of Alberta

Teaching Assistant, Computer Organization and Architecture Jan 2021 - May 2021, Sep 2021 - Present

Edmonton, AB

- Run help sessions for students in need of assistance with the class material.
- Teach weekly lab assignments.
- Grade exams and assignments while fixing grading scripts using bash.
- Onboard other Teaching Assistants with the tools used to mark lab assignments.
- Prepare and proctor midterm exams for students with accommodations.

Canadian Armed Forces

Army Communication and Information Systems Specialist

Edmonton, AB

Oct 2019 - Present

- Setup and operate communication equipment such as CNREs and AN/PRC-117F.
- Improve personnel tracking tool using Flask and jQuery leading to better planning.
- Perform security audits on online web tools such as the hashing algorithm for password storage.
- Manage a detachment of 4 people in the field.

University of Alberta

Research Assistant, Compiler Design and Optimization Laboratory

Edmonton, AB

May 2021 - Aug 2021

- Assist a graduate student with writing 5 experiments using ARM SVE assembly intrinsics.
- Upgrade 2 servers used for assignment testing used in various classes.
- Contribute to an open source tool, RARS, by extending it to multithreaded use.
- Perform code reviews of 4 other people's work.

PROJECTS

RISC-V Assembly & Runtime Simulator

May 2021 - Aug 2021

- **Technologies used:** Java.
- Done as part of research assistant internship.
- Implementation of the RISC-V Atomic extension with support for multithreading.
- Fix the categorization of RISC-V instructions in the statistic tool.

Undergraduate Artificial Intelligence Society

Dec 2018 - Present

- Current President and former General Secretary.
- Lead a team of 7 people with administration and coordination.
- Create and maintain the club website, initially with Middleman and now with Nuxt.js.
- Create and instruct workshops such as implementation of Neural Networks and Git.