

Name

James Pan

Location

Ottawa, Canada

Mobile

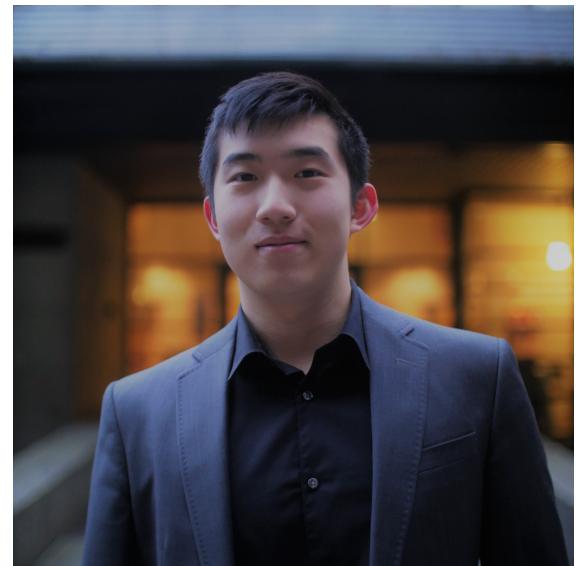
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Email

james.pan@alumni.ubc.ca

Education

B.ASc. Electrical Engineering
The University of British Columbia
Vancouver, BC
September 2018 - May 2023



WORK EXPERIENCE

Current Role

Software Engineer

Company

National Research Council of Canada

Dates

May 2021 - Present

Description

The Advanced Electronics and Photonics (AEP) Research Centre drives innovation in the development of new communications and sensor technologies. My work revolves around quantum-dot semiconductor lasers; I perform research to help design and build software solutions to process data for fast, wireless networks.

- High-level research and investigation into wireless technologies
- Generate detailed reports of findings and potential applications
- Assist with modelling & simulation for experimental configurations
- Offline digital signal processing (DSP) and post-processing
- Review hardware, components, and parts to optimize results

SKILLS & ACADEMICS

Programming Languages

React.js, Java, Python, C, JavaScript, HTML, CSS, C++, MATLAB, R, SystemVerilog, ARM/8052/KCPSM3 Assembly

Software & Technical Skills

Git, AWS, Simulink, Office, Atlassian (Jira, Confluence), RStudio, Framer, Figma, Trello, Freedcamp, Photoshop, SolidWorks, Arduino, Altera (ModelSim, Quartus)

Bachelor of Applied Science

Major: Electrical Engineering & Computer Science
Minor: Economics

International Baccalaureate Diploma

Total Score: 40 Points (94th Percentile)

PREVIOUS ROLES

Software Developer

2020 - 2021

Antario Financial

Antario Financial is an emerging start-up in the realm of fintech and mobile payments. My role as web developer and software engineer was centred primarily on the planning, development, and release of the official company website, viewable at www.ucanpay.ca.

- Spearheaded site architecture and website UX/UI
- Individually developed, tested, and released live site
- Develop automated software solutions in Java (server)
- Extensive product testing/research; generated reports

Avionics Software Engineer 2018 - 2020

UBC AeroDesign

The avionics subteam is responsible for the design, creation, and implementation of all electrical hardware and software for the advanced class aeroplane.

- Developed navigation, data, and settings frameworks
- Forged input/release interfaces with Bing Maps API
- Optimized telemetry data collection/transmission
- Tested and improved drop prediction algorithm

AWARDS & CERTIFICATIONS

Swimming: Varsity Captain & Nationals

Qualified for Swimming Canada Nationals; was lead captain of the Ashbury Varsity Team from 2017 - 2018.

VEX Robotics: 2017 Regional Semi-Finalist

Competed in the 2017 capital region VEX Robotics tournament semi-finals with Ashbury College Robotics.

Interests

- Swimming: Began competitive swimming in 2012.
- Coding: Tinkering with Java, ReactJS, Python, etc.
- Archery: Joined the UBC Archery club in 2018.
- Debate: Participated in 2017 Confederation Cup.

[Check out my portfolio!](#)

<https://jtrpan.azurewebsites.net/>