

# ZHENPENG WU

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## TECHNICAL SKILLS

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<b>Proficient in</b>	C, Java, JavaScript, TypeScript, HTML, SQL, LaTeX, Git
<b>Familiar with</b>	C++, Python, Erlang, Solidity, CSS, React, Shell, Keras, tmux
<b>Exposed to</b>	Lua, AWS, Google Cloud, Docker, Heroku

## WORK EXPERIENCE

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**Teaching Assistant, Department of Computer Science, UBC** Sep 2018 – Present

Courses: Software Engineering, Advanced Relational Databases

- Supervising students building full-stack web applications and personal projects in Java and TypeScript
- Teaching students RESTful API design principles and advanced OO design patterns
- Assisting students in database development and performance optimization for their projects

## SELECTED PROJECTS

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**Radio Modulation Classification Machine Learning Project** Jan – May 2020

Keywords: Keras, Python, Supervised Machine Learning, Convolutional Neural Network

- Implemented neural networks based radio modulation classifier using Keras, specifically ANN and CNN
- Applied the models to RadioML 2016.10A, achieved an average classification accuracy of close to 80% at varying signal-to-noise ratio conditions ranging from 0dB to 18dB

**SoliGity Blockchain Decentralized App** Jan – May 2020

Keywords: Solidity, Blockchain, React, Node.js, Full-Stack Development

- Created a novel platform with Smart Contract in Solidity to help developers to discover, contribute projects they are interested in and get Ethereum as rewards from project owners
- Integrated with GitHub in Node.js for project owners to publish issues and developers to open pull requests
- Ensured an accurate, consistent and transparent transaction records between sponsors and developers, eliminated human error and the need for third-party mediation

**File Transfer Protocol App** Jan – May 2018

Keywords: C, Java

- Developed client side and server side of File Transfer Protocol in Java and C
- Used socket and fork to create and manage multiple TCP connections and exchange data over the connection

**Delivery System React Web App** Jan – May 2018

Keywords: Node.js, React, PostgreSQL Database, Heroku, Full-Stack Development

- Built a React web app to model a mail delivery system, and hosted on Heroku
- Developed a RESTful backend server to embed PostgreSQL database and handle requests from the frontend
- Leveraged object-oriented design principles and patterns to design the application architecture

## EDUCATION

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**University of British Columbia** Sep 2019 – Present

Master of Engineering, Electrical and Computer Engineering - GPA: 4.33/4.33

**University of British Columbia** Sep 2015 – May 2019

Bachelor of Arts, Major in Computer Science - GPA: 4.10/4.33

## HONORS

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**Master of Engineering International Graduate Entrance Scholarship** 2020