

EMPLOYMENT

Software Engineer, GE Healthcare (Seattle, WA)

Dec 17 – present

Software Engineer , TSRI (Kirkland, WA)

Dec 15 – Dec 17

- Developed full-stack web applications with JEE and Angular frameworks
- Programmed cloud development with AWS for full-stack web applications
- Developed and augmented natural language processing tool to modernize legacy system into Java-based web application
- Programmed parser generators with grammar for lexer/parser based on Backus Naur
- Managed sprint releases under agile/scrum methodology

Software Engineer Intern, Tyemill (Seattle, WA)

Jun 15 – Sep 15

- Developed full-stack web application with Ruby on Rails framework
- Improved performance of database operations using eager loading

EDUCATION

University of Washington

Master in Computer Science and Software Engineering

Dec 16

Bachelor in Mathematics

Mar 14

Relevant coursework: object-oriented programming, data structures and algorithms, systems programming, distributed computing, parallel programming, cryptography and data assurance, software architecture, software management, software development processes, software modeling, test and quality assurance, evaluating software design, research methods in software development

TECHNICAL EXPERIENCE

- Facilitated message distribution with an inter-group multicast relay program using multiple computing nodes (messages sent via TCP then broadcasted via UDP) – **socket programming, multi-threading - Java**
- Improved performance of an inversed indexing program using a batch process to sort by keyword – **parallel computing, MapReduce - Java**
- Improved computation time speed up of a 2D graphical wave diffusion program by parallelizing with 4 computing nodes and 4 threads – **parallel computing, OpenMP, MPI - C++**
- Implemented a real-time code analysis graphical tool of version control system with responsive interface (publisher/subscriber) – **JavaFX, MongoDB – Java**
- Developed a robust and secure network protocol for distributed system based on mobile agents concept, with time performance improvement using elliptic curve cryptography – **distributed computing, cryptography, RMI, JCE, JEE - Java**

ADDITIONAL EXPERIENCE

Technologies:

Proficiency with Java

Experience with Python, C++

SQL, JavaScript (Typescript), HTML/CSS

AWS

Experience:

Full-stack web application

Distributed and parallel computing

Applied cryptography

Natural language processing

Socket programming, computer networking and system administration

Project management and software engineering

US citizen and authorized to work

Proficiency with French, and intermediate in Vietnamese and Spanish

[\[https://duchuydo.github.io\]](https://duchuydo.github.io)