

## EMPLOYMENT

### Software Engineer, GE Healthcare (Seattle, WA)

Dec 17 – present

- Cloud development (solution architecture design, micro-service implementation with Java and Python on AWS)
- Web application (React framework)
- Security application (threat modeling, impact assessment, DEPS)
- Scrum master duties

### Staff Computer Scientist, TSRI (Kirkland, WA)

Dec 15 – Dec 17

- Developed full-stack web applications with JEE and Angular frameworks
- Programmed cloud development with AWS for web applications
- Developed and augmented rule-based AI system to transform legacy system into Java-based web application
- Programmed parser generators with grammar for lexer/parser based on Backus Naur
- Managed sprint releases under agile 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

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## 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

Capstone: 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)

Relevant Projects: 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

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## EXPERIENCE

Technologies:

Proficiency with Java (Maven, Gradle)

Experience with Python, C++

SQL, NoSQL (MongoDB, DynamoDB)

JavaScript (Angular), HTML, CSS

Oracle Virtual Box, VMWare, Docker

AWS (EC2, ECS, EBS, Lambda, Batch, S3, RDS, API gateway, SQS, SNS)

Experience:

Full-stack web application

Cloud development and computing

Applied cryptography and cyber security

Computer networking and system administration

Project management and software engineering

US citizen and authorized to work in the US with security clearance

Proficiency with French, and intermediate in Vietnamese and Spanish

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