

# NGOC-THAO LY

SOFTWARE ENGINEER | NYC Metropolitan Area

Github  
Linked In  
Email

[github.com/ngcthao](https://github.com/ngcthao)  
[linkedin.com/in/ngcthao](https://linkedin.com/in/ngcthao)  
[thaoly.engineer@gmail.com](mailto:thaoly.engineer@gmail.com)

## EDUCATION

**Oregon State University**

*Bachelor of Science – BS, Computer Science*

January '23 – Exp. December '24

4.0 GPA

**The City College of New York**

*Bachelor of Science – BS, Mechanical Engineering*

August '16 – February '21

3.32 GPA

## PROJECTS

**Exercise Log Web Application** | Javascript · React · Node · Express

August 2023

- Developed a single-page web application that allows a user to freely register, edit and delete exercise routines
- Followed MERN stack architecture and implemented a REST API to support CRUD operations
- Utilized MongoDB for persistence in order to securely save and retrieve logged data during page rendering
- Implemented React components to create the user interface and allow navigation between pages

**Abstract Data Structure Implementations** | Python

July 2023 – August 2023

- Tasked with creating personal implementations of abstract data structures (stacks, trees, heaps, hash maps)
- Studied ADT applications and their structures, identifying necessary functionalities and limitations
- Designed unit test cases and met desired runtime requirements for all classes and methods
- Successfully implemented working ADTs and their variations while avoiding the use of built-in structures and methods wherever possible

## EXPERIENCE

**Exam Prep Tutor** | Replications Inc. · Practice Benefit Corp. · Huntington Learning Center

June 2022 – Current

- Instructed students in the SHSAT, SAT, AP Calculus and AP Physics exams
- Provided engaging instruction for students and created lesson plans tailored to individual students' needs
- Participated in regular meetings to discuss student progress and suggest program changes
- Assisted students in passing common core classes and achieving their desired exam scores

**Mechanical Engineer** · CAD Drafter | MKS Advanced LED

September 2021 – May 2022

- Collaborated with chief engineer, designers, and managers on ongoing and new lighting design projects
- Created, revised, and edited designs based on product goals, testing results and feedback
- Maintained communication and worked with outsourced manufacturers and designers to develop products
- Designed working prototypes for multiple company projects and prepared documentation for their patenting

## SKILLS

**Languages**

Python · Javascript · HTML · CSS

**Framework & Libraries**

ExpressJS · OpenGL

**Other**

ReactJS · NodeJS · Figma · Selenium · Solidworks