

# NGOC-THAO LY

SOFTWARE ENGINEER | NYC Metropolitan Area

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## 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

August '23

- 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 that supports CRUD operations
- Utilized MongoDB for persistence in order to securely save and retrieve the data during page rendering
- Implemented React components to create the user interface and allow for navigation between pages

### Abstract Data Structure Implementations

July '23 – August '23

- Tasked with creating personal implementations of abstract data structures (stacks, trees, heaps, hash maps)
- Studied the structure and functionality of the ADTs, identifying all necessary functionalities and limitations
- Programmed complex structures while avoiding the use of built-in structures and methods wherever possible
- Designed unit test cases and met desired runtime requirements for all methods

## EXPERIENCE

### Exam Prep Tutor – Replications Inc. | Practice Benefit Corp. | Huntington Learning Center

June '22 - Current

- Instructed students in SHSAT, SAT Math, AP Calculus and AP Physics
- 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 – MKS Advanced LED

September '21 - May '22

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

## SKILLS

### Languages

Python, Javascript, HTML, CSS

### Framework & Libraries

ExpressJS, OpenGL

### Other

ReactJS, NodeJS, Figma, Selenium, Solidworks