Theodore Nguyen

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Education

University of Minnesota – Twin Cities Minneapolis, MN
Masters of Science in Computer Science *Expected May 2027*
Bachelor of Science in Computer Science *May 2025*

Relevant Coursework: Intro to Distributed Systems, Intro to Artificial Intelligence, Intro to Data Mining, Machine Learning for Healthcare, Operating Systems, Database Systems, Program Design & Development, Software Engineering, UI Design

Skills

Languages: Python; Java; C; C++; C#; CSS/HTML/TS/JS; SQL; OCaml
Tools: Azure DevOps; Azure IoT; Docker; Git; Jira; Linux; MySQL; VSCode; PostgreSQL; Postman; MatLab; Unity; Visual Studio

Work Experience

Daikin Applied Americas Plymouth, MN
Software Engineering Intern (Cloud) *May 2025 – Present*
- Developed and published **NuGet packages** for shared components, reducing new project setup time by ~15–20% and standardizing internal code reuse
- Designed and implemented RESTful APIs in C# and with SQL using an API-first approach with Swagger, improving cross-team collaboration and reducing integration issues. Utilized **Postman** for integration testing
- Built and executed automated **XUnit** test suites, increasing test coverage and ensuring reliability of core cloud services

Bracco Medical Technologies Eden Prairie, MN
Software Engineering Intern *May 2024 – August 2024*
- Designed and developed a client-facing UI using **Angular** and **React** to display cardiovascular injector data as Key Performance Indicators, leveraging **Redash** and **PostgreSQL**. Integrated **REST API** calls using FHIR specification and generated synthetic data via a **Python** script to provide customers with real-time analytics
- Deployed both the web application and FHIR server as **Azure IoT Edge** modules, allowing containers to be deployed to downstream devices
- Modified **Azure Pipelines** file to include automated unit testing and linting of the web application which decreased deployment time by **40%** based on testing

Earl E. Bakken Medical Devices Center Minneapolis, MN
3D Printing and Segmentation Specialist *June 2023 – Present*
- Create and upload 3D models to VR using **Unity** to allow clinicians to view and interact with anatomical models
- Work with 50+ doctors and students to design and prototype their medical inventions and desired anatomical models
- Create 3D models of patient anatomy using CT scans in Mimics to 3D print and help visualize patients' physical condition

Research Assistant *February 2024- October 2024*
- Developed a mixed reality guided nasogastric tube placement program using **Unity** and **OpenPose**, enabling clinicians to visualize tube positioning within the patient's body accurately

Undergraduate Research Assistant *June 2023 – January 2024*
- Used **Unity** to develop a VR surgical trainer for a trochleoplasty surgery that incorporates 3D anatomical models and C# coding to apply scripts to in game objects that allows surgeons to train for a surgery without entering the operating room

Projects

Stock Sentiment Analysis
- Built a real time stock sentiment analysis tool using **NLTK VADER** for sentiment valuation, web scraping from **Beautiful Soup**, **Pandas** for data analysis, and **Matplotlib** to visually portray data analyses.

Bloxorz AI
- Wrote a research paper on search algorithms to solve the puzzle game *Bloxorz*, analyzing the efficiency of A* search, BFS, and DFS in beating the game comparing time complexity and solution optimality

Extracurricular

Society Asian Student Engineers | Labs Co-Director *October 2023 – Present*
- Work and mentor a team of students to design and engineer a project every year (ex. drone, mechanical heart)