

HIEU DO

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EDUCATION & HONORS

Colgate University, Bachelor of Arts, Hamilton, NY

May 2023

- Double Major: Computer Science & Applied Mathematics
- GPA: 3.99/4.00, Dean's Award with Distinction for Academic Excellence all semesters
- Relevant Course: Computer Systems, Discrete Structures, Computational Mathematics, Linear Algebra

TECHNICAL WORK EXPERIENCE & RESEARCH

Software Engineer Intern, Tek Chk Systems LLC, Remote

Jul 2021 - Present

- Led a team of 4 web developer interns to develop Culinary Chef's website which connects 4k+ users with local chefs
- Used frameworks such as React, Redux, Sharetribe, and Stripe API to improve the UX of the sign-up pages and implement the front-end of chef's profiles which resulted in a 30% increase in sign-up rates

SealNet Facial Recognition Research, Dept. of Computer Science, Colgate University

May 2021 - Present

- Trained a deep convolutional neural network ([CNN](#)) that has an average precision of 85% and an average recall of 86% to detect seal faces in raw photos to automate the process of creating seal chips
- Created a [graphical user interface](#) (GUI) in C++ that reduced manual chipping and alignment operations by 10x
- Trained a facial recognition [CNN](#) that yielded a rank-1 accuracy of 81% for closed-set identification
- Created a [GUI](#) with Python Tkinter to display prediction using said trained model for ecological research

Multi-robot Motion Planning Research, Dept. of Computer Science, Colgate University

Jan 2021 - May 2021

- Refined existing proofs and lemmas on Minimum Solvable Graphs such as the solvability of an Extended Unicycle, an Extended Star, and an Influenced Zone
- Wrote a new proof on the solvability of two interconnected Influence Zones using knowledge of said lemmas

Teacher Assistant, Dept. of Computer Science, Colgate University

Sept 2020 - May 2021

- Explain class exercises, guide and debug homework and lab that pertains to Object-Oriented Programming and basic data structures such as Stacks and Queues, Linked List, and Maps for a class of 50 students
- Explain COSC290 concepts such as discrete structures: recurrence, asymptotic analysis, and propositional logic

PERSONAL COMPUTING PROJECTS

Auxify - A Live Musical Jukebox - <https://auxify.herokuapp.com/>

Jul 2020 - Mar 2021

- Created a MERN-stack application using Spotify API with 5k+ users, and 250 daily active users
- Led back-end development by building a database model in MongoDB, setting up Nodejs with Express back-end environment, and creating RESTful APIs for the application to communicate between servers and clients
- Built the initial frontend model of Auxify's client UI in React

PrimeTime - A Social Media for Sports Enthusiasts - <https://devpost.com/software/primetime>

Feb 2021

- Built on Next.js and Firebase and utilized the Google Map API as part of Treehack Hackathon
- Responsible for incorporating Google authentication, Firebase database, and Google Map API into the app

Sudoku Solver - <https://github.com/namhieudh2000/SudokuSolver>

May 2020

- Android application built on Android Studio (Java and XML) that solves Sudoku using backtracking

SKILLS

Programming: Java, Python, Javascript, HTML, Matlab, C/C++

Technology: Reactjs, Redux, Nodejs, MongoDB, Express, Firebase, Nextjs, Dlib, Tensorflow, OpenCV, AWS, Heroku, Git

CAMPUS LEADERSHIP & STUDENT INVOLVEMENT

Community Leader, Residential Life, Colgate University

Sept 2020 - Present

- Foster a welcoming and positive living environment for 50 residents by assisting incoming freshmen and international students transition into college life, organizing floor events to promote diversity, relationships, and social health

Member, Colgate Coder's Club, Colgate University

Sept 2019 - Present

- Participate in coding competitions and coding conferences to foster a welcoming environment for incoming computer science students