NISHAN SHEHADEH

2312 Elliston Pl, Nashville, TN 37203 • 914-559-8909 • nishan.g.shehadeh@vanderbilt.edu • https://nshehadeh.github.io

EDUCATION

Vanderbilt University	2019-2023
M.Sc Computer Science, BS Computer Science and Applied Mathematics, School of Engineering	Nashville, TN

Vanderbilt National Merit Scholarship Recipient
GPA: 3.670, CS GPA: 3.757

Rye Country Day School	2015- 2019
SAT: 1520	Rye, NY

MIT 6.006 Algorithms course in computer science

PROJECTS

Deep Learning RF Data (BEAM Lab) — 2021
- Building deep neural network to improve the quality of ultrasound data and data processing
- Completed first two courses of Andrew Ng's Deep Learning Coursera Specialization
- Currently building a supervised learning model using PyTorch and running on Vanderbilt's ACCRE cluster

Real-Time Coherence Verasonics (BEAM Lab) — 2021
- Designed and implemented a real-time acoustic window detection kernel for a Verasonics ultrasound system using Matlab, MEX, and CUDA (C)
- Wrote and optimized an algorithm using parallel computing that interfaces with the Verasonics system
- Designed an intuitive GUI using Matlab

Ray Tracer — 2020
- Implemented a ray tracer using C/C++ that can render images based on scripts, display the results to the screen, and save the images to TIFF files
- Ray tracer can handle ambient light calculations, orthographic cameras, reflections, and shadows

Caritas of Port Chester Food Bank — 2019
- Built a login system and food ordering website for a local food bank on a Scrum development team
- Used HTML, Pug, CSS, MongoDB, and NodeJS to build the website

Personal Portfolio Website — 2021
- Used HTML, CSS, and JavaScript to design a personal website displaying my project portfolio in detail and other personal information, URL: nshehadeh.github.io

WORK EXPERIENCE

Summer Fellow at Vanderbilt Institute for Surgery and Engineering, BEAM Lab — 2021-Present
10-week Paid Student Research Program, Undergraduate Researcher
- Worked for biomedical engineering PhD student for research on transcranial ultrasound (Verasonics project, Deep Learning project)

Indian Harbor Yacht Club — 2017-2020
Launch Tender Captain (2019-2020), Dockhand (2017-19)
- USCG-Certified Captain (up to 100 GRT vessel)
- Managed launches and support vessels; monitored mooring field; implemented safety protocols

Other Work Experience: Save the Sound Lab Technician, Sailing instructor

LEADERSHIP AND ACTIVITIES

Theta Tau Professional Engineering Fraternity, *Service Chair* — Vanderbilt
- Largest engineering fraternity in the nation engaging in social, service, and professional opportunities
- Organized service events for ~100 active members including assisting seniors in getting vaccines, writing letters to seniors, and park cleanups

Midnight Run, *President* — RCDS
- Organized $7,000 worth of fundraising and clothing donations for those in need in NYC

Lacrosse, *Vanderbilt Club Lacrosse Treasurer, RCDS Varsity Captain and MVP* — Vanderbilt

Other Clubs: VandyApps (Mobile App Club), Quantadores (Quantitative Finance Club)

SKILLS

Technical: C++, C, CUDA, Matlab, Python (PyTorch), Deep Learning (Coursera), JavaScript (Node.js), HTML, CSS, Unity