

# NAMYA MALIK

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## EDUCATION

### Dartmouth College, Hanover, NH

*Master of Science* in Computer Science

August 2022

*Bachelor of Engineering* in Computer Engineering

March 2021

*Bachelor of Arts* in Engineering Science

June 2020

## WORK EXPERIENCE

### Deloitte, Arlington, VA

Summer 2021

*Incoming Solutions Engineering Intern*

- Incoming Solutions Engineering Intern in the Government & Public Sector

### Dartmouth College, Hanover, NH

2019-2020

*Teaching Assistant & Peer Tutor*

- TA for COSC 50 (Software Design & Implementation): Held office hours to assist students learning Linux and C, graded student submissions, and answered students' questions daily
- TA for ENGS 21 (Introduction to Engineering): Worked closely with a group of students to help them identify a societal need, design and analyze proposed solutions, and engineer a final working prototype
- Tutor for COSC 1 (Introduction to Programming & Computation): Provided academic guidance to students learning Python

### Collins Aerospace, Everett, WA

Summer 2019

*Program Management Intern*

- Analyzed data from the financial ledger and identified \$2.2M cost-saving opportunities in manufacturing scrap reduction
- Served as the lead Program Manager in a cross-functional team for the replacement of a Display Lavatory Unit

### Digital Applied Learning and Innovation (DALI) Lab, Hanover, NH

Spring 2019

*Project Manager*

- Managed a team of designers and developers to build a set of online linear algebra games for a client

## PROJECT-BASED EXPERIENCE

### IoT Device Sniffer (M.S. Research), Hanover, NH

Spring 2021-Present

- Currently building an IoT (Internet of Things) device discovery + inventory system using network scanning

### GNSS + IMU Inertial Navigation System (ENGS 89/90: Engineering Capstone), Hanover, NH

2020-2021

- Interfaced between a microcontroller and GNSS chipset to produce location data for a GNSS & IMU navigation system

### Social Distancing Implementation System (ENGS 86: Thayer School Independent Project), Hanover, NH

Spring 2020

- Built devices that used microcontrollers to communicate with each other through radio frequency and ultrasound signals, alerting users when two units were within close proximity (six feet) of each other

### Tiny Search Engine (COSC 50: Software Design & Implementation), Hanover, NH

Spring 2020

- Created a search engine that crawled the web and retrieved webpages, created an index of the number of occurrences of a word on a particular webpage, and answered search queries by returning a list of webpages ranked by relevance

### Find Items App (COSC 65: Android Programming), Hanover, NH

Spring 2020

- Developed an Android application that allowed users to save the location of commonly misplaced items (keys, wallet, etc.) in a database by using text, voice and/or taking a picture
- Leveraged Google APIs such as Speech-to-Text and Object Recognition to build a user-friendly interface

### Automatic Salt Spreader (ENGS 21: Introduction to Engineering), Hanover, NH

Winter 2019

- Prototyped a rotating sprinkler device that emitted salt onto non-drivable surfaces such as ramps & staircases to melt snow

### Electronic Combination Lock (ENGS 31: Digital Electronics), Hanover, NH

Summer 2018

- Programmed a FPGA board using VHDL to create a lock that compared a user's 4-digit keypad input to a hardwired passcode
- Incorporated features such as LED indicators and a lock-out mode that engaged after three consecutive failed input attempts

## ACADEMIC AND EXTRACURRICULAR ACHIEVEMENTS

**Honors/awards:** Citations for Meritorious Performance in COSC 50, Citation for Meritorious Performance in ENGS 86, James O. Freedman Presidential Scholar, Sophomore Research Scholar, Neukom Scholar

**Leadership:** Dartmouth Women's Club Soccer, Dartmouth Outing Club Trip Leader

## SKILLS

**Programming:** C, Python, Java, Android Development, Assembly, HTML 5/CSS 3, JavaScript, VHDL

**Systems & Tools:** Linux, Git, Scapy

**Hardware:** Raspberry Pi, Arduino, ARM Microcontrollers, FPGAs