# **Nathan Israel Luskey**

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#### **EDUCATION**

#### Carnegie Mellon University (CMU) School of Computer Science

Pittsburgh, PA

M.S. Computer Science (MSCS)

December 2022

Current Coursework: Machine Learning, Distributed Systems, Statistics

# Georgia Institute of Technology (GT)

Atlanta, GA

B.S. Biomedical Engineering GPA: 3.92/4.0

December 2020

- Minors: Computer Science & Industrial Design
- Stamps President's Scholar (Georgia Tech's top merit-based scholarship)
- Coursework: FDA Waterfall, Systems & Cellular Physiology, Cell Culturing, Object Oriented Programming, Data Structures, Algorithms, Database Management, Mechatronics, Intro to AI, Human Factors, Human-Computer Interaction

# **INDUSTRY EXPERIENCE**

Olive Diagnostics Modiin, Israel

Part-time Software Development Intern

February - August 2021

- Wireframed an entity relationship diagram (ERD) and implemented a MongoDB database with a Python wrapper class for managing early prototypes' raw data and different models' predictions
- Produced Docker Images and Anaconda Environments for Python microservices on IBM Cloud Code Engine

Cathaid Atlanta, GA

Clinical Engineering Intern

January - April 2020

Improved geometry and construction while maintaining critical design features leading off the next round of prototyping

Ethicon Endo-Surgery Cincinnati, OH

Design Co-op in Front End Energy

May - August 2019

- Supported implementation of temperature control algorithm to prevent harmonic scalpel overheating in bariatric surgery
- Streamlined data processing pipeline by consolidating methodologies and documentation through a MATLAB script

Design Co-op in Lifecycle Open Mechanical

August - December 2018

- Improved product usability by quantifying existing linear surgical staplers' performance
- Designed and qualified testing methods and fixtures for ultrasonic weld strength for skin stapler

# **RESEARCH EXPERIENCE**

# Georgia Tech Healthcare Robotics Lab, Dr. Charles Kemp

Atlanta, GA

Undergraduate Research Assistant

May - December 2017

- Set up 1 Degree-of-Freedom robot to automate data collection on flat samples for training an SVM
- Published "Classification of Household Materials via Spectroscopy" in IEEE Robotics and Automation Letters in January 2019

## **ACADEMIC PROJECTS**

### Song Classification for Running Playlists

GT Summer 2020

Developed both k-means clustering and decision tree with pruning to optimize models for classifying songs

#### **Intraoral Dental X-Ray**

GT BME Capstone Spring 2020

Followed FDA waterfall to observe and interview doctors, prototype product, and evaluate doctor's satisfaction

#### **LEADERSHIP**

Honor Council Member, Sigma Nu Georgia Tech

January 2017 - August 2020

**Project Coordinator, Projects Director, and VP of Corporate**, Tech Beautification Day

January 2017 - April 2020

#### **SKILLS**

**Languages:** Python, Java, Go, MATLAB, SQL, C/C++, HTML/CSS/JavaScript **Software:** Docker, MongoDB, Solidworks, HSMWorks, Visual Studio Code

Equipment: CNC Mill, Laser Cutter, 3D Printer, Axial & Linear Load Machines, myDAQ, TI Microcontroller