

## **Gunnar Beck Nelson**



GPA:3.79

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#### **EDUCATION**:

## Virginia Polytechnic Institute & State University (Virginia Tech):

- -MS Computer Science & Applications: Jan. 2020-May. 2022
- -BS Biochemistry—Bioinformatics Track: May. 2015-Dec. 2019
  - Federal Pell Grant recipient-Established residency for in-state tuition, and paid tuition below \$1000/semester

#### **EXPERIENCE:**

## Graduate Research Assistant-TRIMLab-Virginia Tech; Blacksburg, VA; August 2020-Present

- -Studying Human Robot Interaction through deep learning sonification for children with autism
- -Supervise undergraduates through interactive workshops, teaching research skills

## Software Engineer Intern-Y-Combinator-Imaware Health; Houston, Texas; June 2020-July 2020

- -Worked on front end development for interface app constructed in react native Javascript,
- -Perform SQL queries through PostGREs

# Researcher-Cyberbiosecuirty Initiative, Virginia Tech; Blacksburg, VA; January 2020-May 2020

- -Research and handpick case studies datasets using IEEExplore, AMC Database, and Google Scholar
- -Focus on military supply chain utilizing convolution neural networks to fit and improve dataset for recognizing maritime imagery in the visible and infrared spectrums

# Undergraduate Researcher-Synergy Lab, Virginia Tech; Blacksburg, VA; Aug.2019-January 2020

-Aid in construction of python-based U-NET convolution neural networks, and machine learning techniques in Tensorflow/Scikit-Learn, and converting sinograms to CT images for low cost CT-imaging Sales Intern-Headway Platform; *Atlanta*, *GA*; May 2019-August 2019

- -Sold software accounting, recruiting, and backend office solutions to startups in Atlanta
- -Added and touched over 600 B2B accounts added to Headway Platform's sales database
- -Cold called business and establish relationships with business owners and venture capitalists

# Undergraduate Researcher-Virginia Tech Industrial Systems Engineering; *Blacksburg*, *VA*; Jan. 2017-December 2018

- -Published two publications and represented Virginia Tech
- -Established key relationships with endoscopic surgeons and medical leaders

## **PUBLICATIONS/PRESENTATIONS:**

## Journal of Surgical Endoscopy:

- -April 2020-Directional Overview of Machine Learning and Robotic surgery; *Presented at SAGES 2020 Annual Meeting; Cleveland, OH*
- -April 2019-Laparoscopic Release of Median Arcuate Ligament; *Presented at SAGES 2019; Baltimore MD*
- -April 2018-Identifying Curriculum Gap in Fundamentals of Robotic Surgery and Fundamental Skills of Robotic Surgery: Handling Adverse Events; *Presented at 16<sup>th</sup> World Congress Endoscopic Surgery; Seattle, WA*

#### **SKILLS: Website**

Java, Python, Javascript, Reactjs, React Native Convolution Neural-Networks, Linux/Unix Systems, Tensorflow, Scikit-Learn, Keras, Virtual Machines, Machine Learning, Excel, Word, Research, Relationship Building, Time Management, Communications, Public Speaking