



Gunnar Beck Nelson
ngunn15@vt.edu



EDUCATION:

Virginia Polytechnic Institute & State University (Virginia Tech):

GPA:3.79

-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

FrontEnd Developer -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-Cyberbiosecurity Initiative, Virginia Tech; Blacksburg, VA; January 2020-May 2020

-Research and handpick case studies datasets using IEEEExplore, 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

Business Development 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 on international stages for research

-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 16th World Congress Endoscopic Surgery; Seattle, WA*

SKILLS:

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