

# Shiye (Sally) Cao

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## EDUCATION

**Johns Hopkins University Whiting School of Engineering**

**Baltimore, MD**

◆ **Double major in Computer Science & Applied Math**

**August 2018 – Present**

◆ Cumulative GPA: 3.29, Fall 2019 Dean's List

◆ Relevant Coursework:

Computer Vision, Machine Learning, Deep Learning, Intro to Data Science

Deep Learning for Medical Image Analysis, Introduction to Causal Inference

Calculus III, Linear Algebra, Differential Equations, Probability and Statistics for Physical Sciences

Gateway (Java), Data Structures, Intermediate (C and C++), Computer System Fundamentals

**The Madeira School, McLean, VA**

**September 2014 – June 2018**

◆ Cumulative GPA: 96.2/100, National AP Scholar

## TECHNICAL & RESEARCH EXPERIENCES

**Summer Research Intern, Suchi Saria Lab, JHU**

**May 2020-August 2020**

Machine Learning and Causal Inference Related Research at the Saria Lab. Analyzed Electronic Healthcare Record data from hospitals. Worked to identify shifts in patient population and hospital policies over time. Worked to train models that are robust over these shifts and changes.

**Research, JHU Malone Center for Engineering in Healthcare**

**August 2019 – Present**

Group research under Dr. Anton Dahbura. Analyzed patient Electronic Healthcare Record data. Used machine learning and statistical techniques to analyze time-series patient data to look for trends between the frequency and timing of physical therapy and patient recovery.

**DL Intern, Mech-Mind Robotics, Beijing, China**

**May 2019 – August 2019**

Applied Deep Learning to industrial projects in Computer Vision; Researched generation of realistic synthetic data, generalizing models, transfer learning, visualization of convolutional networks (filter visualization), and image depth encoding; Awarded Outstanding Intern

**Intern, Congressman Al Green's Office, Capitol Hill, D.C.**

**May 2017 – June 2017**

Interned on Capitol Hill in Congressman Al Green's office for 5 weeks, answering phone calls, taking notes at briefings, drafting emails, and writing one-pagers on news issues

**Research Assistant, Research Mentorship Program, Santa Barbara, CA**

**June 2016 – August 2016**

Analyzed relationship between online news and movement of stock prices under a UCSB doctoral student mentor using R, linear regression, natural language processing (sentiment analysis), and text mining; presented research at formal university symposium and poster session and drafted a technical paper at the end of the program.

**SKILLS:** For my past projects please visit my GitHub: <https://github.com/Sally-14>

◆ Experienced with Machine Learning, Computer Vision, & Deep Learning (PyTorch and Tensorflow)

◆ Experienced in Python, Java, C, C++, R, LaTeX

◆ Experienced with Git and Linux Systems

◆ In my free time, I enjoy cooking, baking, swimming, and karate

◆ Member of SWE ++ Tutoring program (weekly Scratch/Python class for Baltimore middle schoolers)