

Evan Chugh

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Research Interests

Biomedical applications of computer vision, financial forecasting, graphical rendering techniques using deep learning

Education

Canisius College

Buffalo, NY

- B.S. in Computer Science with a minor in Mathematics, expected May 2021

Selected Coursework

- CSC 112 - Data Structures
- CSC 213 - Large Scale Programming
- CSC 253 - Computer Hardware
- CSC 281 - Automata and Algorithms
- MAT 219 - Linear Algebra

Relevant Skills

- Python
 - Data manipulation: Pandas, NumPy, Scikit-learn
 - Data visualization: Matplotlib and Seaborn
 - Model building: Scikit-learn, Keras, TensorFlow
- Java/C++
 - Integration of data collection pipelines
 - Implementation of pre-trained machine learning models
- Full stack web development
 - Node.js: Express framework
 - MongoDB
 - MySQL

Employment History

- Research Assistant Aug. 2018 - Present
- Tutor Aug. 2018 - Present

Awards and Honors

- Canisius Earning Excellence Program, 2018
- Canisius Earning Excellence Program, 2019

Research Grants

2018 - Present (received at Canisius College)

- “Electroskip: Using Machine Learning to Improve Patient Response in Physical Therapy”
 - Investigated the use of recurrent neural networks in creating real-time responses to human motion. Used gait and pressure data for classification of patients with Parkinson’s Disease. Implemented a data collection system into the existing application pipeline. A study based on this work has shown moderate success in correcting the gait of patients with Parkinson’s Disease.
- “Applications of Convolutional Neural Networks in Echocardiogram Analysis”
 - Independently established a relationship between Canisius College and a local medical practice. Gained experience with IRB and HIPAA guidelines. Created a utility to scrub studies of PHI. Worked with doctors to label high risk indicators of heart disease, then constructed and trained a convolutional neural network to be used in future patient screenings.

Undergraduate Research Experiences / Internships

- Canisius College / Northtowns Cardiology Summer 2019
 - “Applications of Convolutional Neural Networks in Echocardiogram Analysis”

Presentations

- “Electroskip: Using Machine Learning to Improve Patient Response in Physical Therapy” April 2019

References - Upon Request