

Ryan McCormick

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EDUCATION

Binghamton University, State University of New York, Watson School of Engineering
Bachelor of Science in Computer Science, Bachelor of Arts in Mathematics

Expected: May 2019
GPA: 3.93/4.00

SKILLS

Languages: Python, C++, Bash/Zsh, C, Java, LaTeX, HTML, CSS

Software/OS: Git, Make, Anaconda, GDB, Vim, Atom, Visual Studio, TexStudio; Arch Linux, Ubuntu, Debian, CentOS

PROFESSIONAL EXPERIENCE

Air Force Research Lab - Sensors Directorate, Software Engineering Intern

May '17 - Aug '17

- Researched machine learning with Dr. Roman Ilin at the Wright-Patterson Air Force Base
- Utilized MATLAB and Python to obtain graphical and statistical models
- Explored object representations of Convolutional Neural Networks and a novel concept for layerwise accuracy

PUBLICATIONS

Automatic Sign Language Recognition

Jan '16 - Jan '17

- Wrote a proposal to track and classify hands in 3D space with the Leap Motion Controller
- Beat state of the art accuracy on a given dataset by 18.5% with our features
- Published at IEEE International Conference on Image Processing 2017 (To Appear)

PERSONAL PROJECTS

Pokéfetch

Apr '17 - Present

- Scrapes pokémon wiki for useful information on any valid pokémon input with Python and BeautifulSoup
- Outputs relevant information and sprite in "Neofetch" fashion with various options to Unix command-line

CryptoCipher

Mar '17

- Takes plaintext/encrypted message and encrypts/decrypts it using Python and PyEnchant
- Restricted to "Caesar ciphers" but can decode without key through brute-force spell-checking approach

TwitterStocks

Mar '17

- Scrapes Twitter for positive/negative keywords related to stocks/companies using Python-Twitter
- Tallies results to predict if stock will likely trend upward or downward in next day

Where's Waldo 3D

Nov '16

- Worked in a team of 3 to create a Microsoft HoloLens app in 24 hours at HackAE
- Learned and implemented Unity to create a Where's Waldo hide-and-seek game in Augmented Reality

LEADERSHIP

HackBU, Organizer, Binghamton University

Apr '17 - Present

- Work with diverse team to generate ideas for weekly computer science workshops
- Help to organize hackathons and secure funding from sponsors

Graphics and Image Computing Lab, Research Assistant, Binghamton University

Jan '17 - May '17

- One of few undergraduates accepted for tackling image processing problems among PhD students
- Assisted with facial recognition algorithms and correcting point detection errors

Guest Speaker, Binghamton High School

Apr '17

- Delivered an introduction to computer science presentation to local high school students
- Demonstrated concepts through Python games and web development with "GitHub Pages"

Physics Teaching Assistant, Binghamton University

Aug '16 - Jan '17

- Taught and conducted experiments to relate topics to real world applications
- Quizzed and graded students in order to gauge understanding of material

JET MIP Participant, Japan

Jul '14 - Aug '14

- 1 of 32 in US awarded grant from Japan Foundation, LA for disaster relief in Japan
- Conducted outreach among destroyed areas to uncover ongoing challenges