Chester Huynh

(+1) 804-402-2270 | xhuynh1@jhu.edu | ChesterHuynh | chesterhuynh

Education

Johns Hopkins University *Baltimore, MD*
B.S. IN COMPUTER SCIENCE, B.S. IN BIOMEDICAL ENGINEERING (FOCUS: DATA SCIENCE). GPA: 3.96 *Aug. 2017 - May 2021*
- **Dean's List** (2017 - PRESENT)
- **Computer Science Coursework**: Data Structures (CS226), Computer System Fundamentals (CS229), Algorithms (CS433), AI (CS464)
- **Mathematics Coursework**: Honors Linear Algebra (MATH212), Probability (AMS420), Statistics (AMS430), BME Data Science (BME475)

Experience

Medtronic *Framingham, MA*
SOFTWARE ENGINEER, INTERN *May 2019 - Aug. 2019*
- Led Summary Website for Automation project as a part of Medtronic's MCS R&D cohort on the Validation & Verification team.
- Composed user needs and requirements documentation to guide project design and execution.
- Developed nightly updating dashboard website to reduce the need for text-heavy XML test result files and time between Agile work cycle sprints.
- Leveraged knowledge in the Django web framework, Python, JavaScript, HTML/CSS, SQL, IIS, SVN, and C#.

Neuromedical Control Systems Laboratory (Prof. Sridevi Sarma) *Baltimore, MD*
UNDERGRADUATE RESEARCH ASSISTANT *Dec. 2018 - PRESENT*
- Optimized threshold clustering algorithm for locating and labeling SEEG electrodes in brain scans to accelerate patient coregistration by 200%.
- Contributed to NCSL neuroimaging pipeline by implementing Python script that automates localization and labeling electrodes in brain scans.
- Investigated computational models that can identify neural sources for seizures in patients with intractable forms of epilepsy.
- Leveraged knowledge in Python, Scikit-Image, and Git.

Leadership

JHU Applied Math & Statistics Department *Baltimore, MD*
TEACHING ASSISTANT FOR PROBABILITY AMS420/620 *Aug. 2019 - PRESENT*
- Responsible for leading and preparing for review sessions and weekly recitations, holding office hours, and grading assignments and exams.
- Content includes combinatorics; transformations on probability, joint, and conditional distributions; limit theorems; and stochastic processes.

JHU Office of Academic Support *Baltimore, MD*
PILOT LEADER *Aug. 2018 - Aug. 2019*
- Directed weekly sessions in Organic Chemistry and Discrete Math with 10-15 undergraduates through problem sets to supplement course content.
- Committed to weekly preparatory meetings with other leaders to prepare for sessions.

Research & Projects

TetrisAI *https://github.com/ChesterHuynh/tetrisAI*
PERSONAL PROJECT *Jul. 2019*
- Developed using Python and TensorFlow/Keras to further understanding in machine learning, deep learning and reinforcement learning.
- Achieved a score of 700,000 points given scoring schema, using Q-learning neural networks to approximate state-action q-values.

Medhacks: Team TriTag *https://devpost.com/software/tritag*
CO-FOUNDER, TOP 10 IN CATEGORY AWARD *Sep. 2018*
- Created a modern, digital approach to the medical Triage risk assignment scheme involving an iPad app and an Arduino-based identifier.
- Designed app using React Native framework and utilized Google Firebase server to house human-readable JSON data entries.

Achievements

2018	**Medhacks 2018 Finalist**, Developed digital tool for first responders to assign risk levels to patients at incident sites.	*Baltimore, MD*
2017	**MIT Think 2nd Place Winner**, Funded with a $1000 grant to conduct a project with a peer on integrating piezoelectric sheets into roadways as a method for signaling of traffic light operation.	*Cambridge, MA*

Skills

Programming Skills	*(Proficient):* Python, Java, C++, *(Learning):* C, HTML/CSS, JavaScript
Technologies/APIs	*(Proficient):* NumPy, Scikit-learn, Django, UNIX, *(Learning):* TensorFlow/Keras, PyTorch, Pandas, PyGame, R, Git, Bash scripting, D3, *(Beginning):* Microsoft SQL, PostgreSQL
Human Languages	English, Cantonese, Mandarin, Spanish

Extracurriculars

Hippocrates Medical Review (HMR) *Baltimore, MD*
BIOTECHNOLOGY COMMITTEE WRITER *Aug. 2018 - PRESENT*
- JHU's medical editorial that publishes articles on the official HMR **website** and prints articles in the HMR journal publication.
- Authored three articles that have been featured on the HMR website with one featured in the HMR 2019 journal publication.

TEDxJHU *Baltimore, MD*
MULTIMEDIA SPECIALIST *Aug. 2017 - PRESENT*
- Responsible for photographing and recording speaker events and advertisements as well as editing and creating event and promotional videos.
- Created promotional videos for events as well as edited and curated videos for the official TEDx site and YouTube channel.