

Research Interests

Machine learning for solving neural engineering problems, mechanisms of neural activity in natural human behaviours.

Education

University of Washington, Seattle WA – PhD Candidate, 2019-Present

Virginia Commonwealth University, Richmond VA – Bachelor of Science in Computer Science, 2019

Technical Skills

Languages – Python, Java, R, Perl, C, SAS, Unix, MATLAB

Tools – Tensorflow, Keras, Android developer, GitHub, LaTeX, PyTorch

Research Experience

Paul G. Allen School First-Year Ph.D. Fellow, University of Washington – 2019-Present

Researching neural state decoding and semi-supervised machine learning, analysing naturalistic neural recordings of speech production and spontaneous human behaviors.

Undergraduate Research Assistant, VCU, Department of Computer Science – 2016-2019

Conducted research on building tools for genomics-based classification problems and pattern recognition through deep neural networks.

Science Education Alliance (SEA) – 2015

<https://www.hhmi.org/science-education/programs/science-education-alliance>

<https://www.ncbi.nlm.nih.gov/genbank/>

Participant in Phage Hunters Advancing Genomics and Evolutionary Science. Isolated novel bacteriophage from soil samples. Annotated genomes for submission to GenBank.

Research Assistant, University of Virginia, Computer Science Department – 2014-2017

Conducted hours of investigative research on large intellectual property and patent litigations, and consults in regards to problem solving and organization.

Teaching and Outreach

NeuroMatch Academy Course Developer (NMA-CD). Developed course materials for [Week 2 Day 2](#)

“Linear dynamical systems”. Contributed to the design and creation of NMA teaching materials with tutorial design and Python implementation.

Student Led Seminar Committee for UW Computational Neuroscience Center (UW-CNC). Started seminar series focusing on junior faculty and post-docs in neural engineering. Speakers are chosen by undergraduate and graduate students.

Publications

Flounlacker, F., Johnson, A., Marquez, D., and Miller, R, on behalf of the 2015-2016 VCU Phage Hunters*, **Complete genome sequences of Bacillus phages DirtyBetty and Kida, Genome Announcement**

Posters

[Dean's Undergraduate Research Symposium](#), 2018

[Phage Lab Infographic](#), 2016

Awards

Paul G. Allen School Dean's First-Year Ph.D. Fellowship, 2019

[Winner of the Dean's Undergraduate Research Symposium](#), 2nd place, VCU, 2018

Dean's Undergraduate Research Initiative (DURI) Fellow, VCU, 2018

Goldwater Scholarship Honourable Mention, 2017

Phi Kappa Phi – Life Sciences Undergraduate Scholarship, 2017

Dean's List, Virginia Commonwealth University, 2014 – 2019

Academic Achievement Award NB, Virginia Commonwealth University, 2015 – 2019