Ronan Perry

Curriculum Vitae

Johns Hopkins University Baltimore, MD ⊠ rperry27@jhu.edu rflperry.github.io github.com/rflperry

Education

Expected B.S. Applied Mathematics & Statistics, Johns Hopkins University,

2020 Baltimore, MD.

GPA: 3.92

Expected M.S.E. Biomedical Data Science, Johns Hopkins University, Balti-2020 more, MD.

Experience

Academic Research

2019 Research Assistant, Johns Hopkins University, NeuroData.

Current -Compared performance of novel random forest algorithm against traditional ML and DL methods

- -Utilized multiview learning techniques for generating low dimensional, discriminable representations of fMRI data
- Research Intern, Ecole Polytechnique Federale de Lausanne, MIP:Lab.
 - -Developed pipeline to automatically segment non-human primate brain tissue classes
 - -Deconvolved fMRI signals to identify spatial and temporal patterns in the brain
- 2018 Research Assistant, Johns Hopkins Medical, Popel Lab.
 - -Collected data on NSCLC from literature and fit a PKPD MATLAB model
- Research Intern, Boyce Thompson Institute, Fei Lab.
 - -Developed Perl scripts to investigate genetic sources of cucurbit diseases resistance

Industry Internships

- 2017 **Software Intern**, Rheonix Inc., Ithaca, NY.
 - -Optimized image classification model parameters to improve accuracy and robustness
- **Software Intern**, URSA Space Systems, Ithaca, NY. 2016
 - -Created probabilistic geospatial model linking ships detected in satellite images to identification data

Preprints

[1] Ronan Perry, Tyler M. Tomita, Jesse Patsolic, Benjamin Falk, and Joshua T. Vogelstein. Manifold forests: Closing the gap on neural networks, 2019. URL: https://arxiv.org/abs/1909.11799.

Teaching

- 2019 **Teaching Assistant**, Johns Hopkins University. Applied Math 430: Intro to Statistics
- 2018 **Teaching Assistant**, Johns Hopkins University. Applied Math 420: Intro to Probability
- 2017 **PILOT Leader**, Johns Hopkins University. Multivariate Calculus tutor

Service

o JHU Splash: Taught custom classes to local highschoolers

Honors

o Dean's List (2016-2019)

Technical Skills

Computing Python, R, Java, MATLAB
Other Unix, Github, git, LATEX