Ronan Perry

Curriculum Vitae

Johns Hopkins University

Baltimore, MD

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□ github.com/rflperry

Education

- 2020 B.S. Applied Mathematics & Statistics, Johns Hopkins University, Baltimore, MD.
- 2020 M.S.E. Biomedical Data Science, Johns Hopkins University, Baltimore, MD.
- 2018, Fall **Study Abroad Experience**, Technical University of Denmark, Lyngby, DK.

Experience

Academic Research

- 2019— Research Assistant, Johns Hopkins University, NeuroData.
- Current $% \left(1\right) =0$ -Compared performance of novel random forest algorithm against traditional ML and DL methods
 - -Explored methods for generating and discriminating between low dimensional representations of fMRI data
 - 2018 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.
 - -Obtained data on NSCLC from literature and Fit a PKPD MATLAB model.
 - 2015 **Research Intern**, Boyce Thompson Institute, Fei Lab.
 - -Developed 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.
- 2016 Software Intern, URSA Space Systems, Ithaca, NY.
 - -Created probabilistic geospatial MATLAB model linking objects 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