Derek Jones

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williamdjones

Education

University of Kentucky — **Lexington, KY**
M.S., 3.70 — *August 2016 – May 2018*
Major: Computer Science
Advisors: Dr. Nathan Jacobs & Dr. Sally R. Ellingson

University of Kentucky — **Lexington, KY**
B.S., 3.09 — *August 2011 – May 2016*
Major: Computer Science & Mathematical Economics

Experience

Data Scientist — **San Francisco, CA**
ATOM Consortium — *September 2018 - Present*

ChemBio Data Scientist — **Livermore, CA**
Lawrence Livermore National Laboratory — *September 2018 - Present*

Data Science Summer Institute — **Livermore, CA**
Lawrence Livermore National Laboratory — *June 2018 - September 2018*

Intern — **Berkeley, CA**
Lawrence Berkeley National Laboratory — *June 2017 - August 2017*

Research Assistant — **Lexington, KY**
Markey Cancer Center — *January 2017 - May 2018*

Teaching Assistant — **Lexington, KY**
Department of Computer Science, University of Kentucky — *August 2016 - May 2017*

Technical Experience

Proficient:

- Python, C/C++
- PyTorch, Keras, Sci-kit learn, Pandas, Numpy, HDF5, PyCharm

Experienced:

- Matlab, R
- Tensorflow, Multiprocessing, Git

Publications

Conference Papers

Derek Jones, Jeevith Bopaiah, Fatemah Alghamedy, Nathan Jacobs, Heidi L Weiss, W A de Jong, and Sally R Ellingson. Polypharmacology within the full kinome: a machine learning approach. In *AMIA 2018 Informatics Summit*, 2018.

Fatemah Alghamedy, Jeevith Bopaiah, Derek Jones, Xiaofei Zhang, Heidi L Weiss, and Sally R Ellingson. Incorporating protein dynamics through ensemble docking in machine learning models to predict drug binding. In *AMIA 2018 Informatics Summit*, 2018.

Poster Sessions

Derek Jones, Nathan Jacobs, and Sally Ellingson. Learning deep feature representations for kinase polypharmacology. In *ACM Richard Tapia Celebration of Diversity in Computing*, 2018.

Derek Jones, Sally R Ellingson, and W A de Jong. How low can you go? feature selection for drug discovery. In *Commonwealth Computational Summit*, 2017.

Talks

Derek Jones. Leveraging large scale molecular dynamics simulations and deep learning for binding activity models. SIAM 2019 Conference on Computational Science and Engineering, 2019.

Theses

Derek Jones. Scalable feature selection and extraction with applications in kinase polypharmacology. Master's thesis, University of Kentucky, 2018.

Grants and Awards

2018 ACM Student Reserch Competition (SRC) Travel Award

2018 ACM Richard Tapia 2018 Travel Scholarship

2018 UK CS Departmental travel grant

2017 Supercomputing (SC) 2017 Student Volunteer Travel Award

2017 CRA Computing Sciences Research Pathways Fellowship (LBNL)

2017 Lyman T. Johnson Diversity Fellowship

2017 AAAI 2017 Scholarship

2017 AAAI 2017 Diversity Workshop travel award

2017 UK CS Departmental travel grant

Volunteering Experience

2017 Supercomputing (SC) 2017 Student Volunteer

2017 AAAI 2017 Student Volunteer

Organizations

2016-present Association for Computing Machinery (ACM)