

ALYSSA MORROW

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EDUCATION

UNIVERSITY OF CALIFORNIA
BERKELEY

Doctor of Philosophy, Computer Science. May 2017–present
Advisors: Anthony Joseph and Nir Yosef.
Masters of Science, Computer Science. August 2015–May 2017

UNIVERSITY OF WISCONSIN
MADISON

Bachelor of Science GPA 3.94
Academic All Star Scholarship

HONORS AND AWARDS

GRADUATE RESEARCH
FELLOWSHIP
AUG 2017-AUG 2020

National Science Foundation (NSF)

EUGENE L. LAWLER PRIZE
MAY 2017

UC Berkeley EECS Student Awards Committee

RESEARCH

UNIVERSITY OF CALIFORNIA
BERKELEY
GRADUATE STUDENT
RESEARCHER

RISE LAB

- Distributed visualization for large genomic datasets
- Scalable kernel methods for sequence based prediction of transcription factor binding sites
- Generalized machine learning pipeline on epigenetic datasets

YOSEF LAB

- Epigenetic landscape of reprogrammed T cells
- Prediction methods of protein binding from chromatin accessibility

PUBLICATIONS

Morrow, A., et al. "Mango: Exploratory Data Analysis for Large Scale Sequencing Datasets." Cell Brief Reports, in submission.

Morrow, A. "Distributed Visualization for Genomic Analysis." University of California, Berkeley EECS Technical Report EECS-2017-82. 2017.

Morrow A., et al. "Convolutional Kitchen Sinks for Transcription Factor Binding Site Prediction." arXiv preprint arXiv:1706.00125. 2017.

AWS Big Data Blog post: Morrow, A. Exploratory data analysis of genomic datasets using ADAM and Mango with Apache Spark on Amazon EMR, July 2018.

PRESENTATIONS

EPIGENETIC LANDSCAPE
OF REPROGRAMMED
T CELLS

- Poster Presentation: RSG-DREAM 2018, New York, November 2018
- Poster Presentation: RSG-DREAM 2017, New York, November 2017

MANGO: DISTRIBUTED
VISUALIZATION FOR
GENOMIC ANALYSIS

- Tutorial/Talk: ISCB-LA SolBio EMBnet 2018, Vina del Mar, Chile, November 2018
- Talk: Bioinformatics Open Source Conference (BOSC '16), Orlando, FL, July 2016
- Talk: Data by the Bay, San Francisco, CA, May 2016
- Talk: EMBO Conference on Visualizing Biological Data (VIZBI 2016), Heidelberg, Germany, March 2016

DATA SCIENCE:
IMMUNOTHERAPY OF
CANCER
SPRING 2017-SPRING 2018
UC BERKELEY

TEACHING

- Created new data science course with MCB department around
- Developed curriculum regarding coding practice and statistical analysis of datasets related to cancer immunotherapy

SEARCH COMMITTEE:
ASSOCIATE PROVOST FOR
DATA SCIENCE DIVISION

SERVICE

- Search committee member for Associate Provost for the Division of Data Science and Information and Dean of the School of Information at UC Berkeley

WICSE 40TH REUNION
COMMITTEE MEMBER

- Aided in organization of UC Berkeley Women in Computer Science and Engineering (WICSE) 40th reunion

OUTDOOR COORDINATOR
CSGSA
AUG 2017-PRESENT

- Computer Science Graduate Student Association
- Organize outdoor social events

SECRETARY
WICSE
AUG 2016-PRESENT

- Women in Computer Science and Engineering
- Organize and document WICSE events
- Mentor new female grad students
- Update WICSE website

PEER ADVISOR
BAY AREA GPS
OCT 2016 - OCT 2017

- Graduate Pathways to STEM
- Mentored minority prospective graduate applicants

STUDENTS MENTORED

Abhinav Adduri, UC Berkeley, Undergraduate
Weston Hughes, UC Berkeley, Undergraduate
Alex Ku, UC Berkeley, Masters
Gunjan Baid, UC Berkeley, Masters
George He, UC Berkeley, Undergraduate
Jung Lin Doris Lee, UC Berkeley, Undergraduate

INDUSTRY

MICROSOFT RESEARCH: INTERN
MAY 2017 - AUG 2017

- Investigated correlation between DNA methylation and gene expression data in cancer genomics in 300 TB dataset

QUALCOMM: INTERN
MAY 2015 - AUG 2015

- Developed and tested Wide Band Code Division Multiple Access networking protocols

DEVELOPER: SMART UQ
SEPT 2014 - MAY 2015

- Developed middle and front end stack for simulation and analytics software
- Recruited software level 1 engineers

CO-MANAGER/DEVELOPER
TWIN LAKES PROGRAMMING
FEB 2014 - JAN 2015

- Co-designed and developed software intended to externally evaluate employer progress while exposing gender and race biases in the workplace

PROGRAM ANALYST INTERN
KOHL'S IT
MAY 2014 - AUG 2014

- Designed and developed a pipeline to recommend clothing using state of the art image recognition technology

PROGRAM MANAGER
SOFTWARE TRAINING FOR
STUDENTS
AUG 2012 - SEPT 2014

- Taught custom seminars for large groups of students on subjects such as MATLAB, Javascript and Adobe design products
- Managed 25 peer teachers