

# Merlin Levine

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Washington, D.C. Metro Area

## EDUCATION

### University of Maryland

B.S. Computer Science | GPA: 3.75

Expected Dec. 2017

### University of North Carolina

B.S. Biology, Second Major in Chemistry

President of INSPIRE: STEM tutors

May 2013

## COURSEWORK

Algorithm Design and Analysis<sup>+</sup>

Multithreading and Concurrency<sup>+</sup>

Web Development<sup>+</sup>

Organization of Programming Languages

Introduction to Data Science

Computer Systems

Object-Oriented Programming

Discrete Structures

Linear Algebra

Applied Probability and Statistics

+ current coursework

## SKILLS

### Proficient

Java | Python | C

### Familiar

R | Ruby | OCaml | LaTeX | Y86

### Learning

JavaScript | PHP | HTML | CSS | MySQL

## PUBLICATIONS

Sare RM, **Levine M**, et al. Sleep abnormalities in mouse models of fragile X syndrome. Submitted for Publication. 2016.

Sare RM<sup>+</sup>, **Levine M**<sup>+</sup>, et al. Behavioral phenotype of *Fmr1* knockout mice during active phase in an altered light dark cycle. *eNeuro*. 2016; 3(2).

+ co-first authors

Sare RM, **Levine M**, et al. Chronic sleep restriction during development can lead to long-lasting behavioral effects. *Psychol Behav*. 2015; 155: 208-217.

## LINKS

**Website:** merlinlevine.github.io

**LinkedIn:** in/merlinlevine

**Github:** merlinlevine

## EXPERIENCE

### The MITRE Corporation – *Software Engineering Intern*

McLean, VA | June 2016 – Feb. 2017

- Created an internal software application to model the safety and airworthiness of small unmanned aircraft systems using Java and the Java Swing API.
- Conducted an analysis of U.S. population density data in R.
- Wrote Python scripts for fast prototyping of physics engine.
- Presented risk analysis findings to a panel of government research organizations.

### University of Maryland – *Research Assistant*

College Park, MD | Oct. 2016 – Present

- Collect, analyze, and report data for the University of Maryland's Graduation Survey and for departmental and campus-wide career fairs using R and MS Office.
- Work 20 hours per week while attending classes.

### National Institutes of Health – *Postbac IRTA Fellow*

Bethesda, MD | Sept. 2013 – Aug. 2015

- Performed behavioral, physiological, and histological experiments on rodent models to study the role of sleep in disorders associated with autism.
- Analyzed data with MS Excel, Python, and SPSS.

## PROJECTS

### WordNet® Graph (Ruby)

- A directed acyclic graph with a multiple-hash implementation to store information from the WordNet® lexical database.
- Methods to traverse the graph, find shortest ancestral paths, and detect word outcasts are included in the implementation.

### Bag (C)

- A custom multiset implementation using a hash table that handles collisions with binary search trees.
- The BST structure allows for accessing elements in  $O(\lg n)$  time compared to  $O(n)$  time for linked lists.

### Minimum Snippet (Java)

- An application that returns the shortest subsequence from a document of strings containing all specified search terms in  $O(n)$  time using parallel ArrayLists.

### Rice Rocks Game (Python)

- A 2D space-shooter game incorporating object-oriented design and event-driven programming.