Katherine Erickson

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• katherineerickson.com • github.com/katur

Skills Django, Python, Java, SQL, database design, HTML, CSS, LaTeX, git (all in OS X or Linux)

Dabblings JavaScript, jQuery, C, R, ML, PHP

M.S. in Computer Science New York University, current (expected graduation 2015), 4.0 GPA

B.A. Oberlin College, 2006, Biology and Cinema Studies majors, Chemistry minor, 3.88 GPA

- Highest Honors in Biology, Phi Beta Kappa Honor Society, and Sigma Xi Scientific Research Society
- Merit Scholarships: John Oberlin, Robert B. and Sophia Whiteside, National Merit
- Biology Prizes: Leo S. Millar, Hope Hibbard, Florence Burger

H.S. Diploma East High School, Duluth, MN, 2002, 4.0 GPA, Valedictorian (shared)

GRE 2011, Quantitative 800/800, Verbal 780/800, Analytical Writing 5.5/6

Employment

Assistant Research Scientist *Labs of Drs. Fabio Piano and Kris Gunsalus, NYU Center for Genomics and Systems Biology (2009-present)*

Engineered Django-based interfaces (from database design to front-end design) to record, analyze, and present data for research projects, totaling millions of experiments, and often requiring cleaning years of previously aquired data. Created user-friendly web tools to organize the lab's stocks and strains, saving lab members time and money. See code, schemas, and screenshots at `katherineerickson.com`.

Also assisted with benchwork, experiment design, and biological analysis of genome-scale screen using pairwise gene knockdowns to uncover genetic interactions in *Caenorhabditis elegans* early embryogenesis.

Client Service Coordinator *H&R Block, Washington, DC (2009)*

Sole secretary and receptionist for a large office during tax season. Managed 6 phone lines, scheduled appointments, processed tax returns, addressed clients' issues, proctored exams, and earned tax preparation certificate.

Deli Manager and Cook *Sticky Fingers Bakery, Washington, DC (2007-2008)*

Managed deli production and inventory, developed recipes, and cooked at an all-vegan bakery.

Research Technician and Assistant *Lab of Dr. Taylor Allen, Oberlin College Biology Department (2005-2007)*

Mapped and characterized suppressor mutations to reveal interactions within and between muscle proteins in *C. elegans*. Wrote honors thesis about the project, and presented findings at international scientific meetings.

Prior Job Experience Support Staff at home for women with schizophrenia. Dietary Aide and dishwasher at assisted living home. Many years of early morning newspaper delivery.

Other Experiences

Bicycle Touring Organized and conducted self-supported tours coast-to-coast across the Southern United States, along the Mississippi River, circumnavigating Lake Superior, and from Portland to San Francisco.

Steel Drums Competed with 100-member NY Pan Sonatas in five NYC Panorama competitions (3 wins). Played and toured with Oberlin's student-run steel drum band, and taught a course for college and high school students.

Wildlife Conservation Built WordPress site for a birder's conservation project. Documented roadkill on cross-country trip to encourage responsible driving. Helped rehab birds and small mammals throughout childhood.

Food Coops As member of Oberlin Student Cooperative Organization, mediated 60-person discussions as Discussion and Loose Ends Coordinator; served as Treasurer, bread baker, and pizza maker; and survived four years in the vegan, no-sugar, at-least-half-whole-wheat coop. Current member of the Park Slope Food Coop.

Publications, Abstracts, Presentations

• White AG, Lees B, Kao HL, Cipriani PG, Munarriz E, Paaby A, Erickson K, Guzman S, Rattanakorn K, Sontag E, Geiger D, Gunsalus KC, Piano F. DevStaR: High-throughput quantification of *C. elegans* developmental stages, IEEE TMI, 2013.

• 16th International *C. elegans* Meeting, UCLA, June 2007. Abstract/Poster: "Reversion Analysis with *unc-54* and *unc-90* Mutants Reveals Paths of Communication within Myosin and within Its Regulatory System."

• 51st Annual Biophysical Society Meeting, Baltimore, March 2007. Abstract/Poster: "Communication within Myosin and between It and Troponin."

• Undergraduate Honors Thesis and Presentation, 2006: "Interactions Made by Myosin and by Troponin-T: Genetic Suppressor Analysis."

• 50th Annual Biophysical Society Meeting, Salt Lake City, March 2006. Abstract/Poster: "Interactions Made by Myosin and by Troponin-T: Genetic Suppressor Analysis."

• 15th International *C. elegans* Meeting, UCLA, June 2005. Abstracts/Posters: "Novel Domains of the Muscle Regulatory Protein Troponin-T and Their Roles" and "Design and Efficacy of Two Investigative, Physiological Projects Using *C. elegans*."