Anthony F. Cannistra

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Permanent Address: 10 Glen Ellen Drive, Cumberland, RI, 02864-5034, USA

Education

University of Washington
Seattle, WA

Degree Ph.D. candidate, Biology (*beginning September 2016*)

Focus Application of machine learning techniques to ecological data in an effort to inform resource preservation and conservation efforts. Advised by Dr. Lauren Buckley.

Tufts University
Medford, MA

Degree B.S., Computer Science and Biology, Cum Laude. (2011-2015)

GPA 3.53/4.0 (Dean's List)

Coursework Machine Structure and Assembly Language Programming, Data Structures, Programming Languages, Computational Biology, Algorithms, Genetics, Computation Theory, Evolutionary Biology, Neuroscience, Concurrent Programming, Machine Learning, Conflict Resolution and Negotation, Distributed Systems

Leadership Organizer, TEDxTufts; Co-President, Tufts Idea Exchange; Co-Project Lead, TuftsLife; Executive Board Member, Tufts Computer Science Exchange; Lodge Caretaker, Tufts Mountain Club; Tour Guide, Tufts Admissions

Experience (read more at http://www.anthonycannistra.com)

Aspen Center for Environmental Studies, *Naturalist*, June 2015–Present
- Led daily guided tours around the Aspen, Colorado area. Independently developed tour content and delivery strategies engineered to foster a deep respect and curiosity for place in a diverse group of participants.
- Greeted guests, answered phones, and conducted on-site Naturalist duties at the Hallam Lake Nature Center in Aspen. Trained to become a Great Horned Owl handler.

Tufts University Computational Biology Research Group, *Researcher*, May 2013–Present
- Funded by Professors Benjamin Hescott, Lenore Cowen, and Mark Crovella (BU) for work on network-based protein function prediction and biological network alignment.
- Developed and implemented algorithms in Python that built upon Hescott and Cowen's Diffusion State Distance (DSD) metric to incorporate genetic protein-protein interaction data into function prediction.
- Currently writing scientific paper describing algorithms for submission to a peer-reviewed journal.

Tufts University Department of Computer Science, *Teaching Assistant*, Fall 2012–Present
- 5 Semesters: Programming Languages, Data Structures, Problem Solving by Computer, Machine Structure and Assembly Language Programming, Introduction to Computer Science.
- Held office hours, labs, and graded programming assignments.

TEDxTufts, *Organizer*, Spring 2014–Present
- Along with a core team of 9 others: researched, applied for, and acquired a University event license from TED Conferences to host our own independently-organized TEDxTufts event. Selected team of 35 students from over 100 applications. Recruited and mentored undergraduates, alumni, graduate students, postdoctoral scholars, faculty, and staff to present.
- Built statically-generated web presence for the event, at http://www.tedxtufts.com.

Passions

The Great Outdoors (hiking, climbing, ecological conservation), understanding others by understanding their stories, collaborative and consensus-driven decision making, critically examining higher education and it's greater purpose, the power and failures of the scientific method, thinking about how people use technology, supporting the spread and accessibility of great ideas, and reading powerful writing.

Skills

Languages	C, C++, Python, Erlang, Standard ML, Scheme, HTML, CSS, JavaScript
Tools	LaTeX, Git GitHub, Node.js, OS X, Windows, Unix/Linux, AWS S3 and EC2.