

CONSTANTIN BERZAN

constantin.berzan@tufts.edu

- EDUCATION** **Tufts University**, Medford, MA
B.S. in Computer Science, expected May 2012
Minor in Cognitive and Brain Sciences
GPA: 4.0/4.0
Honors: CRA Outstanding Undergraduate Research Award 2012 Honorable Mention, Tau Beta Pi Engineering Honor Society, Lt. Commander Robert James Manning Memorial Prize, Howard Sample Prize, Dean's List all semesters
Courses: Algorithms, Machine Learning, Abstract Linear Algebra, Statistics and Probability, Behavior-based Robotics, Artificial Intelligence, Theory of Computation, Computational Geometry, Statistical Pattern Recognition
- Orizont Lyceum**, Chisinau, Moldova
National Olympiad in Informatics First Place (2006, 2007), Second Place (2008)
International Olympiad in Informatics Qualifier (2007)
Moscow State University, Junior Math Dept. (distance study, graduated 2008)
- RESEARCH EXPERIENCE** **MIT CSAIL**, Cambridge, MA, advised by Dr. Una-May O'Reilly
Research Intern, MSRP, June 2011 - August 2011
- Admitted from a competitive nationwide applicant pool
 - Developed algorithms to optimize the cabling layout on a wind farm
 - Conducted literature review of related problems
 - Presented a poster, and published results in a technical report
- Tufts University**, Medford, MA, advised by Prof. Matthias Scheutz
Research Assistant, October 2010 - October 2011
- Developed algorithms to extract state transition model from robot logs
 - Studied and implemented the Baum-Welch algorithm for HMM training
 - Submitted a paper to the AAMAS 2012 conference (under review)
- Tufts University**, Medford, MA, advised by Prof. Norman Ramsey
Summer Scholar, May 2010 - August 2010
- Built and explored a model of N-replica file synchronization
 - Implemented composable, reusable file system abstractions in Haskell
 - Presented a poster at the Tufts Undergraduate Research Symposium
- TECHNICAL EXPERIENCE** **Tufts IT Services**, Medford, MA
System Administrator Assistant, October 2008 - February 2010
- Performed installation and maintenance of research software
 - Set up web-based homework delivery system for Math department
- Google**, Mountain View, CA / Chisinau, Moldova
Contract Developer, Summer of Code, May 2009 - August 2009
- Interned remotely with the KDE Open Source project
 - Designed and developed a mail dispatcher agent for Akonadi, a multi-process, concurrent PIM framework
- COMPUTER SKILLS** C, C++ (STL), Java, Python (numpy, matplotlib), bash, Haskell, Qt toolkit, Linux administration, Subversion, Git, L^AT_EX

LEADERSHIP **Tufts Computer Science Reading Group**, Medford, MA

Coordinator, October 2010 - present

- Organized readings and bi-weekly discussions of research papers

Active Minds Tufts Chapter, Medford, MA

Secretary, May 2010 - May 2011

- Organized events to increase awareness about mental health on campus

Tufts Robotics Club, Medford, MA

Lead Programmer, November 2010 - April 2011

- Developed robot navigation for the Trinity Firefighting Competition

INTERESTS

Artificial Intelligence, Machine Learning, Robotics, Emergent Behavior, Human Cognition, Language and Consciousness, Open Source, Origami