

NATHAN TARRH

SOFTWARE DEVELOPER & STUDENT

1 Ossipee Rd 2
Somerville, MA 02144
(781) 799-8438
nate@natetarrh.com

Education

Tufts University

Bachelor of Science in Computer Science

May 2014 (expected)

GPA: 3.50

Selected CS coursework: Algorithms, Data Structures, Machine Structure & Assembly
Language Programming, Programming Languages, Advanced Functional Programming,
Operating Systems

Selected other coursework: Advanced Electronic and Digital Media, Entrepreneurial
Leadership, Experimental Film: Aesthetics and Production, Postmodernism and Film,
Technological Tools for Learning

Experience

Tufts Center for Engineering Education and Outreach

May 2011—present

Research and Teaching Assistant

Lab for Playful Computation: developing BlocklyTalky, a platform for networked, tangible
creations using the Raspberry Pi and Google's Blockly programming editor.

Integrating Engineering and Literacy: designed and developed curricula and workshops for
engineering education in elementary schools.

Harvey Mudd College

June 2013—August 2013

Research Assistant, NSF REU

Intelligent Music Software: implemented context-free grammar parsing (CYK algorithm) to
create higher-order roadmaps for jazz chord progressions. Optimized algorithmic matching
for music with 100-150% speedup.

WMFO Medford — 91.5 FM

February 2012—present

Software Development

Developed: web scraper to find lyrics and flag explicit tracks (digital catalog of ~250 thousand
songs); taste profiler using playlist history and the Echo Nest API to recommend radio shows
to listeners. Responsible for server administration of catalog, station wiki, and public website.

Technical

Languages:	C/C++	Python
	Java	JavaScript
Frameworks:	Node.js/Express	Flask
Other:	*nix toolkit	SVN/Git