

WILLIAM T. TARIMO

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QUALIFICATIONS

- I have a combined 7 years of research and technical experience in education technology, pedagogy design, and basic applied robotics
- I have demonstrated expertise in full-stack web development in Ruby On Rails and JavaScript frameworks
- Extensive programming and development experiences in Java, Ruby, Matlab, Python, JavaScript, Scheme, HTML5, and CSS3
- A strategic thinker with abilities to learn on the go and to adapt to multiple roles and changing environments

EDUCATION

Brandeis University, Graduate School of Arts and Sciences, Waltham, MA

Ph.D. Expected in August 2016

Dissertation Title: [Computer-Supported Agile Teaching \(CSAT\)](#)

Doctoral Fellowship: Teaching & Research Assistantship

Brandeis University, Graduate School of Arts and Sciences, Waltham, MA

MA Awarded in February 2014

Major: **Computer Science**

GPA: 3.59

Relevant Courses: Fundamentals of AI, Networked Information Systems, IT Entrepreneurship & Software Development, Android Development, Statistical Machine Learning, Computational Linguistics, Scientific Computing

Connecticut College, New London, CT

BA Awarded in May 2012

Majors: **Computer Science and Mathematics**

GPA: 3.66

Relevant Courses: Database Systems, Multimedia, A.I, Algorithms, Robotics, Web Technologies & Mobile Computing, Structured Computer Organization, Operating Systems, Data Structures, Python, Probability, Linear & Abstract Algebra, Calculus II, III, Real & Complex Analysis, Discrete Mathematics, Statistics

TECHNICAL PROFICIENCIES

Programming: Ruby On Rails, Ruby, Python, Java, Matlab, SQL, NoSQL, HTML5, CSS3, JavaScript, JQuery, Scheme, PHP, XML, Node.JS, XQuery, AngularJS, MarkLogic, Bootstrap, Android Development, Roxy

Systems: Windows, MacOS, Linux, iOS, Android, [GitHub](#), [Bitbucket](#), CodeShip, Heroku, Git, Meteor, Express

Language: English - Fluent, Swahili - Native, Spanish - Conversational, Khmer - Beginner

Other: Robotics, Web Development, Customer Service, IT Service, Agile Development, IT Entrepreneurship, Education, Education Technology, Research, Teaching, Analytical, Organizational, Quantitative, Initiative

PROFESSIONAL EXPERIENCE

Department of Computer Science, Brandeis University, Waltham, MA

Sept 2012 – Present

Doctoral Researcher & Teaching Assistant

- Conduct research in the areas of educational technology, agile pedagogy and learning analytics
- Develop [TeachBack](#), an in-class web application for active computer-mediated interactive pedagogies
- Assist teachers and students to adopt flipped classroom teaching and learning using TeachBack
- Regularly present and publish doctoral research works in CCSCNE, CSEDU, and FIE conferences
- A hands-on Ph.D. or admin teaching assistant in courses that teach web & mobile development in Ruby On Rails, JavaScript, Cordova Phonegap, AngularJS, Node.JS, and Meteor; and programming courses in Java & Python

Boston Solutions Center, MassMutual Financial Group, Boston & Springfield, MA

May 2015 – Aug 2015

Academic Coop-Intern

- Served as an Assistant Researcher and Associate Knowledge Architect
- Provided support and technical expertise in designing and building a MarkLogic-based knowledge base system

Computer Science Department, Connecticut College, New London, CT

May 2010 – May 2012

Researcher & IEEE Member

- Developed a robotics training system using wireless communication, simulation, image processing, and overhead camera
- Studied, designed and developed Cyclic Genetic Algorithms (CGA) for gait generation for 4 & 6 legged servo-robots
- Conducted studies on the effects of adding 'greedy genetic selections' on Cyclic Genetic Algorithms
- Presented and published three research works during CEC and SMC conferences
- Co-chaired the Mobile Robot Control session during IEEE's SMC conference
- Reviewed papers for IEEE World Congress on Computational Intelligence conference

Information Services, Connecticut College, New London, CT

Aug 2008 – Aug 2012

IT Service Assistant

- Provided technical support to the college community on computer software and hardware problems

- Mastered customer support over the phone, in-person, email, IM and the WebHelpDesk online system
- Assisted and collaborated with IS staff with operational and project-based tasks on new features and software

Computer Science Department, Connecticut College, New London, CT

Sept 2009 – May 2012

Teaching Assistant & Robotics Lab Manager

- Assisted instructors and students in courses that taught Python, Java, Scheme and LEGO programming
- Organized a robotics lab, managed parts inventory, and assisted in ordering new supplies

NOTABLE TECHNICAL PROJECTS

TeachBack – Brandeis University

Jan 2013 – Present

- A Ruby On Rails web application for classroom use to support classroom interactions such as feedback, forum, assessment, collaboration, note-taking, and collection & analysis of student progress.
- **Notes:** Doctoral Work. Followed Agile Development, automated deployment and scaling using CodeShip & Heroku
- **Technologies:** Ruby On Rails, JavaScript, Bootstrap, Git, Pusher, Heroku, CodeShip, JQuery, Gravatar, PostgreSQL

Recreating Images Using Transparent Overlapping Polygons – Brandeis University

Jan 2013 – May 2013

- Used genetic algorithm and hill-climbing theories to machine-learn optimal attributes and arrangements of transparent overlapping polygons that recreates a target image
- **Notes:** Team-based Class Project. Played lead roles on project proposal, planning, coding, and AI.
- **Technologies:** Matlab, Matlab Image Processing Toolkit

Classifying Yelp Data – Brandeis University

Jan 2013 – May 2013

- Performed experiments to discover the best classifiers for a large amount data from Yelp ratings. Explored various classification method learned in the Statistical Machine Learning class.
- **Notes:** Team-based Class Project. Feature Selection, Down-sampling, Model Evaluation, Managing Datasets.
- **Technologies:** Weka with Random Forest (RF), Support Vector Machine (SMO), AdaBoost.M1, Logistic Regression, Bayesian Networks

The Affective Tutor – Brandeis University

Jan 2013 – May 2014

- Earlier version of TeachBack developed in JavaScript and the Parse framework
- **Notes:** Doctoral Work. Used Parse, a cloud-based backend for mobile and web applications
- **Technologies:** Parse, JavaScript, JQuery, JQuery Mobile, NoSQL

BrandITE – Brandeis University

Jan 2013 – May 2013

- A simple, mobile friendly JavaScript web application for voting and managing discussion topics for the BrandITE club
- **Notes:** Personal Project. Used Parse, a cloud-based backend for mobile and web applications
- **Technologies:** Parse, JavaScript, JQuery, JQuery Mobile, NoSQL

CFC Score Predictor – Connecticut College & Brandeis University

Jan 2012 – May 2012 & Sept 2012 – Dec 2012

- A simple application and game allowing Chelsea FC fans to predict scores for soccer games
- **Notes:** 2 Individual Class Projects. First was a PHP web application. Second was in Python, with full graphical interface
- **Technologies:** Python, PHP, MySQL, PHP-Server, File IO, Image Processing, CSS3, HTML5, JavaScript, Session Storage

Cyclic Genetic Algorithms & PAL with Fitness Biasing – Connecticut College

Sept 2010 – May 2012

- Developed a machine learning system that utilizes machine learning using a computer simulation of a robot, wireless communication and an over-head camera vision to learn control programs for on-ground legged robot.
- **Notes:** Undergraduate Research. Used Cyclic Genetic Algorithm, Punctuated Anytime Learning, Fitness Biasing theories
- **Technologies:** Matlab, Scheme, Basic Stamp II, XBee, Power Tethering, Servo Motors, Robot Construction, IP Camera, Image Processing

LEADERSHIP & VOLUNTEERING EXPERIENCES

Club Memberships

- BrandITE (Brandeis IT Entrepreneurship Lunch and Learn) – Brandeis University
- Students Taking Action to Fight Fistula (STAFF) – Connecticut College
- African Student Union (ASU) – Connecticut College
- International Students Club) – Connecticut College

Jan 2013 – Dec 2013

Sept 2008 – May 2012

Sept 2008 – May 2012

Sept 2008 – May 2012

Student Advisory Board (SAB) President – Computer Science Department, Connecticut College

Sept 2011 – May 2012

AWARDS

- The Computer Science Award for excellence in research, academics, and service: Connecticut College
- Dean's High Honors & Dean's Honors: Connecticut College
- Davis Scholar: Connecticut College
- KECK Research Grant Recipient: Connecticut College
- United World College (UWC) Scholar: Waterford Kamhlaba UWC-SA

Jan 2012

Sept 2008 – May 2012

Sept 2008 – May 2012

May 2010

Jan 2006 – Dec 2007