WILLIAM T. TARIMO

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QUALIFICATIONS

- I have a combined 7 years of research and technical experience in programming, education technology, pedagogy design, and basic applied robotics.
- I have demonstrated expertise in full-stack web development in Ruby On Rails and JavaScript frameworks, with extensive programming and development experiences in Java, Ruby, Matlab, Python, JavaScript, Scheme, HTML5, and CSS3
- I'm a strategic thinker and I'm fueled by passion in my works. I cherish learning on the go and in adapting to multiple roles and changing environments.
- **I am looking for full-time jobs in software engineering with interest in <u>scientific research</u>, education technology and robotics.**

EDUCATION

Brandeis University, Graduate School of Arts and Sciences, Waltham, MA   ***Ph.D.*** *Awarded 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 taught 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   *Jan 2013 – Dec 2013*
- Students Taking Action to Fight Fistula (STAFF) – Connecticut College   *Sept 2008 – May 2012*
- African Student Union (ASU) – Connecticut College   *Sept 2008 – May 2012*
- International Students Club) – Connecticut College   *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   *Jan 2012*
- Dean's High Honors & Dean's Honors: Connecticut College   *Sept 2008 – May 2012*
- Davis Scholar: Connecticut College   *Sept 2008 – May 2012*
- KECK Research Grant Recipient: Connecticut College   *May 2010*
- United World College (UWC) Scholar: Waterford Kamhlaba UWC-SA   *Jan 2006 – Dec 2007*