# **Thomas Donahue**



## **Experience**

Mar 2014- Robot Software Engineer, Aldebaran

As a member of a small, agile (scrum) team, I design and build immersive behavior and functionality into Aldebaran's range of humanoid robots. I work on the full stack, but my passion is generating dynamic natural language dialogs that yield intuitive, productive and meaningful human-robot interactions.

Keywords: Python, Robotics, HRI, NLP/NLG, JS, HTML/CSS, C++, Scrum, Linux, Git

2012 - 2014 Research Assistant, Human Robot Interaction Lab, Tufts University

Implemented distributed notification system for the ADE middleware. Overhauled system GUIs for ADE middleware with improved efficiency and speed, as well as a simplified UX. Designed and conducted HRI studies investigating the role of remote video feeds on perceptions of robot teammates (published IROS14). Developed software for data-mining rich audio and video corpora and annotations. Designed and built web-survey platform for multiple HRI studies.

Keywords: Java, Robotics, HRI, NLP/NLG, PHP, JS, HTML/CSS, Linux, Git, SVN, LTEX, R

2012, 2013 **Teaching Assistant**, Computer Science Dept., Tufts University

Maintained automated testing suite for introductory C++ course. Provided instruction to students during lab sec-

tions as well as office hours.

2010 - 2012 **Research Assistant**, Computer-Human Interaction Lab, Bowling Green State University

Part of a team that developed a novel, tangible password input system. Designed, built and tested an alternative UI for World of Warcraft for the visually impaired community. Helped build a series of web-tools for use in undergraduate Geology courses. Investigated the learning benefits of and tradeoffs between mouse, touch and tangible input systems.

Keywords: Java, C++, HCI, Tangible/Touch UIs, Accesibility, Windows

#### **Technical Skills**

#### Languages

Core: Java, Python, C++

Experienced: PHP, JS, Clojure, HTML/CSS

Exposure: C, R, SQL, Scheme, SML, Prolog, CUDA

**Tools** 

src Control: Git, Subversion
Build: Ant, Leiningen

Editors: Emacs, IntelliJ IDEA, Visual Studio

Writing: LATEX, Org-mode

**Platforms** 

Linux: Considerable Linux development experience, and comfortable at the command line shell

Robotics: Extensive experience working with Aldebaran's NaoQi robotics middleware, as well as ADE – a research focused

distributed, multi-agent robotics middleware. Familiar with ROS.

### Education

2012 - 2014 Graduate studies in Computer Science, Tufts University, Medford, MA

Withdrew in good standing from Computer Science & Cognitive Science Joint-Ph.D. program

2011 - 2012 M.S. in Computer Science, Bowling Green State University, Bowling Green, OH

2007 - 2011 B.S. in Computer Science & Psychology, Bowling Green State University, Bowling Green, OH

Minor in Mathematics, Cum Laude