

Dr. Joseph T. Foley

18 Acorn St.
Cambridge, MA 02139

Work: (617)253-7530
Cell: (617)233-4590
Email: foley@mit.edu

Professional

Mechanical Design, Radio Frequency Identification, Manufacturing Design and Process Control, Computer Automation, Distributed System Design, Network Administration and Security, Database Applications.

Interests

Robotics, Automatic Identification and Information Collection, Wireless Communications, Computer-CAM/Instrument Interfaces, Digital Design, Home Automation.

Education

Bachelor in Computer Science and Electrical Engineering (MIT, June 1999)

“Low-cost Automated Pine-Car Derby System”

Master of Engineering in Computer Science and Electrical Engineering (MIT, June 1999)

“An Infrastructure for Electromechanical Appliances on the Internet”

MIT Doctorate of Philosophy in Mechanical Engineering (MIT, February 2007)

“Security Approaches for Radio Frequency Identification Systems”

Experience

Software Engineer, Government & Industrial Division

June 2007 – present

Developing new hardware platforms for the iRobot PackBot.

iRobot Corporation

Burlington, MA

Post-Doctoral Associate

October 2006 – October 2007

Analyst for energy efficiency in industrial applications. Building models for energy calculations and product design to reduce energy utilization and generation of pollutants.

Massachusetts Institute of Technology

Cambridge, MA

Graduate Research Assistant

September 1999 – October 2006

Researcher for Professor Sanjay Sarma in the MIT AutoID Labs.

Designed and implemented demonstrations of AutoID technology in Cambridge, UK Exposition.

Focused on research into Internet-enabled RFID Privacy and Security.

Massachusetts Institute of Technology

Cambridge, MA

Consultant

February 2000 – June 2001

Consulted on manufacturing M3/M5 Tactical Illuminator as part of graduate manufacturing coursework (2.810). Focus was on increasing part quality and throughput using Japanese manufacturing techniques.

Insight Technologies

Londonderry, NH

Lead Mechanical Designer

July 1998 – September 1998

Designed full immersion game simulator mechanical platform leveraging MIT Aero-Astro vection research.

Brute Force Games

Cambridge, MA

Network and Computer Administrator

March 1994 - August 1995

Network Installation: Analysis, Design, Upgrading/Installing.

Computer Equipment Service: Software and Hardware Repair/Administration/Migration.

Brooks Automation

Lowell, MA

Skills

Computer languages: C(++), Perl, Python, PHP, Java, XML, lexx, SQL, PICASM

UN_X/Media development tools: HTML/CGI, L^AT_EX, PostScript, sh, CVS/Subversion, Kerberos

Mech E Tools: Matlab, Maple, ProEngineer, SolidWorks, CNC Machining
Digital System Design: Logic Analyzer, Serial Protocol Analyzer, Controller Simulators