# Marie Burkland

500 Memorial Drive · Cambridge, MA 02139 · Phone: (810) 656-5053 · Email: mburklan@mit.edu

Education Massachusetts Institute of Technology (MIT)

Cambridge, MA

Candidate for Bachelor of Science in Chemical Engineering; GPA: 4.8/5.0

June 2013

Relevant coursework: Multivariable Calculus, Differential Equations, Chemistry, Biology.

**Almont High School** 

Almont, MI

Valedictorian in class 146 students; GPA: 4.0

June 2009

### Work **Experience**

# United States Army Tank Automotive Research, Development and Engineering Center (TARDEC)

Summer Intern for Petroleum and Water Systems

Warren, MI

- Worked 40 hours per week on four-person team to develop and implement a June-Aug. 2010 direct integrity test to determine quality of ultrafiltration membranes on the Lightweight Water Purifier (LWP), used in the field during military operations.
- Researched possible testing methods and developed project phases.
- Built a model filtration system, chose most efficient integrity test, implemented test onto LWP.
- Wrote 18-page technical report on testing procedures and results.
- Presented work to leaders within TARDEC.

**Tutoring** Almont, MI

Middle School Math Tutor

Nov. 2007-May 2009

- Assisted 3 students with homework assignments and test preparation for 2 to 4 hours per week.
- Scores of 2 of 3 students improved by 2 full letter grades.

## Leadership **Experience**

#### **High School National Honor Society**

May 2007- May 2009

Secretary

- Recorded meeting minutes and attendance, kept records of community service activities for 45 members.
- Headed school's plastic and paper recycling program. Included 25 classrooms, assembled teams to collect and transport recyclables weekly.
- Organized and ran two Red Cross blood drives, collected over 100 blood donations.

#### **High School Student Council**

Aug. 2007-May 2009

Secretary

• Documented 32 weekly meeting agendas and minutes, recorded attendance of 43 members.

Class Vice President

Aug. 2005-May 2007

Worked on a team to organize 7 school functions, helped run weekly meetings.

## **Activities** & Awards

#### **MIT Varsity Athletics**

Aug. 2009-present

**High School Varsity Athletics** 

Cross country, indoor and outdoor track, team member.

Cross country and track and field, team captain.

Aug. 2005-May 2009

Girls' Travel Ice Hockey, Sarnia, Ontario

Sept. 2000-April 2009

Team captain.

**Mott Community College Mathematics Competition** 

April 2008

1<sup>st</sup> place out of 30 teams.

**Detroit Free Press Scholar-Athlete Award** Channel 7, Detroit, WXYZ Brightest and Best Award May 2009 May 2009

**Computer:** Microsoft Office Suite, familiarity with C++.

Language: Intermediate proficiency in Spanish.

**Skills**