**Kathryn E. Vogel**

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**EDUCATION**

**Massachusetts Institute of Technology (MIT) Cambridge, MA**

*Candidate for Bachelor of Science in Biological Engineering* GPA: 4.1/5.0 June 2013

*Candidate for Minor in Management*

Relevant Coursework: Introduction to Computer Science & Programming; Corporate Financial Accounting; Management Marketing; People and Organizations; Instrumentation & Measurement for Biological Systems; Fundamentals of Biological Engineering Laboratory

**Shawnee High School** **Medford, NJ**

Class Rank: 5/381 SAT: 720/800 Math 730/800 Critical Reading 670/800 Writing June 2009

Awards: 2008 PSAT/NMQST Semi-Finalist awarded to students in top 1%; 2006-2008 National Latin Exam Gold Medalist

**EXPERIENCE**

**Karlsruhe Institute of Technology Karlsruhe, Germany**

*Researcher* June 2012-Aug 2012

* Analyzed mathematical models such as Tikhonov Method in order to improve current Electrocardiography (ECG) methods and reconstruct the heart’s transmembrane voltage(TMV)
* Improved Tikhonov method by utilizing first order solution norms rather than standard second order solution norms.
* Increased TMV reconstruction accuracy by 31% and submitted results for publishing

**General Dynamics Electric Boat (EB) Groton, CT**

*Program Management Intern* June 2011-July 2011

* Developed Pareto charts to track progress during submarine construction and analyze financial burden to company. Charts were presented at weekly meetings to supervisors and directors
* Engaged in financial introduction training module regarding the Earned Value Management principles used at EB to track production progress
* Coordinated and executed an EB Groton site tour for 47 government and civilian personnel from MIT Oceanic Engineering Graduate Program to educate about the nuclear submarine facilities

**Management Marketing Final Project** **Cambridge,MA**

*Marketer* May 2011

* Created a new product line of science kits called “Tech Girl” targeted for young girls in order to solve the problem of stagnant sales for a science kit manufacturer
* Collaborated with 4 other team members to perform customer analysis, market segmentation, positioning, promotion, and pricing for “Tech Girl”
* Presented “Tech Girl” at the end of the term to 4 marketing executives from Boston advertising firms, 2 Sloan School of Management professors, and 60 undergraduate students
* Voted second best team by marketing professionals, professors, and students out of 12 competing teams

**LEADERSHIP**

**Vice President of Finance, Sigma Kappa Sorority** **Boston, MA**

* Create a budget of $66,000 for the 2011-2012 and 2012-2013 fiscal years to manage 120 members Nov 2010-Present
* Oversee finances for all philanthropic events, retreats, and all chapter sponsored activity
* Transitioned all chapter financial activity to a new online billing system and instructed 120 members how to use the new system.

**Student Representative, Committee on Student Life Cambridge, MA**

* Analyzed and created solutions to campus issues on a team with 6 Faculty, 1 Dean, 4 graduate students, and 3 undergraduates. Issues included new dining plan implementation, improving campus transportation, and the restructuring of the student government
* Co-authored written reports of the committee’s suggestions to MIT Administration, including the VP of Finance and Chancellor

**SKILLS**

**Software** Python, MATLAB, MS Office, MS Publisher

**Languages** English (Native speaker), German (Intermediate level)

**Laboratory**  Gel Electrophoresis, Polymerase Chain Reaction, Mammalian Tissue Culture, Restriction Enzyme Digestion, Bacterial Transformation, Western Analysis, Electroporation, Phage purification

**INTERESTS**

Stammtisch (German discussion group) • Soccer • Women & Gender Studies • Malcom Gladwell • Watching ballet