#### PAUL R. OJANEN

Bristol, TN 423-914-7751 engineer@alum.mit.edu

**OBJECTIVE:** To impart a rigorous and thorough understanding of topics in STEM, particularly computer science To be part of a coordinated program to wholly develop students while preparing them for college

### FORMAL EDUCATION

Bachelor of Science in **Computer Science and Engineering**Massachusetts Institute of Technology
Humanities concentration in the history of technology and its impacts on society

Candidate for Master of Liberal Arts in Mathematics for Teaching

Harvard University Extension School

Served as Teaching Fellow for one graduate-level math course

All but one of classes completed, focus on classical mathematics, thesis TBD

#### **TEACHING EXPERIENCE**

Volunteer Math Tutor

### **Dorchester High School** (Academy of Public Service)

Boston, MA

2007-2008

Assist algebra and geometry teachers twice a week in this urban school by sitting with specific students during regular class time and by holding after-school homework and review sessions. My unofficial role as a tutor is helpful when engaging students who do not relate well with teachers yet do respond positively to alternative help.

## Middle East Education through Technology (MEET)

Jerusalem, Israel

Year Two Instructor and Volunteer

2006-present

Team-taught Java software engineering principles to a diverse group of 21 advanced high school students Mentored a self-led team of six students to completion of a unique software project with a realistic business plan

Continue to help perfect the technology curriculum to better suit organizational goals and student preparedness Campaign for awareness and funds; Assist in annual recruitment, selection and training of new instructors

MEET brings together Israeli and Palestinian teenagers for a three-year commitment to learn computer science and entrepreneurship. Students gain teamwork and leadership skills while experiencing successful cooperation.

#### **Autonomous Robot Design Competition** (MIT course number 6.270/6.185)

Cambridge, MA

Teaching Assistant and Organizer

2002-2003, 2006-2008

Through hands-on workshops, this popular course teaches students of any major how to build and program robots using LEGOs and hand-built electronics. I am involved in nearly all aspects of this for-credit course.

### **Duke University Talent Identification Program**

Davidson and Durham, NC

Instructor

2000, 2001, 2002, 2003

As instructor during intensive three-week courses for gifted middle schoolers, I led a class of 15-18 students and oversaw one teaching assistant. Each class was eight hours per weekday, and three hours on Saturday. I taught seven individual courses over four years and was responsible for lectures, coursework, exams and evaluations.

<u>Introductory Computer Science in C++</u> (two terms), each term was equivalent to one college semester course. Selected textbook and software, created syllabus and designed frequent laboratory work

<u>Algebra II</u> (four terms) and <u>Geometry</u> (one term), each term was equivalent to one complete high school subject. Crafted lecture material, exams and assignments to comply with NC Standard Course of Study Demonstrated student mastery of curricular content through NC End-of-Course standardized testing

# **ENGINEERING EXPERIENCE**

### Senior Software Engineer and Director of Engineering

DropFire, Cambridge, MA

Developed software and hardware solutions for mobility and data interoperability within the public safety sector

#### Communications Officer and Network Engineer

Captain, USAF, various locations

Primarily planned and deployed tactical communications systems for the 1st Combat Communications Squadron

#### **Project Engineer and Software Developer**

Kintronic Laboratories, Bluff City, TN

Retrofitted an antenna test and measurement facility; built integrated electrical engineering design software

Detailed Software and Military Resumes available at http://ojanen.com/resumes