**ARMAGHAN BEHLUM**
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## Education

2011-2015 **HARVARD UNIVERSITY** **CAMBRIDGE, MA**

Bachelor of Arts in Applied Mathematics with a focus in Computer Science. John Harvard Scholar 2012-2013
Cumulative GPA: 3.918 | Concentration GPA: 4.00
**Languages:** HTML/CSS/JS, Java/Android, Python, C, PHP, Matlab, OcaML
**Applications/OS:** Windows, Ubuntu/Linux, Git, Emacs
**Other:** Soldering

2005-2011 **SEWANHAKA HIGH SCHOOL** **FLORAL PARK, NY**

Graduated with High Honors and as Valedictorian.

## Experience

Jan. 2012 - Aug. 2013 **HARVARD UNIVERSITY - OLVECZKY NEUROBIOLOGY LAB** **CAMBRIDGE, MA**

**Research Assistant**
Performed brain surgeries on rats, brain removal, and analysis of motor behavior in rats and of brain damage. Research work lead to LesionPlot and RatSigs projects outlined below. Will be included in published academic paper due to work in data analysis.

Sept. 2012 - May 2013 **HARVARD UNIVERSITY - MULIVARIABLE CALCULUS** **CAMBRIDGE, MA**

**Course Assistant**
Offered one hour long weekly review sessions for 20 undergraduate students and graded homework. Also lead one or two hour long weekly Q&A office hours that was open to the whole course and attended by about 30 students a night.

Sept. 2013 - Dec. 2013 **HARVARD UNIVERSITY – CS50: INTRODUCTION TO COMPUTER SCIENCE** **CAMBRIDGE, MA**

**Teaching Fellow**
Lead one and a half hour long weekly teaching sections for 15 students and graded homework. Grading involved reading and offering feedback on code. Teaching involved preparing small coding problems and practice questions on various topics in computer science. Also involved a three hour Q&A session about homework once a week.

Aug. 2013 - Sept. 2013 **PAKATHON** **CAMBRIDGE, MA**

**Organizer**
Pakathon was a hackathon to support development in Pakistan in one of six important fields that included education and disaster response. The winning Boston team received $5,000 to launch their project and we awarded a first and second place prize of $3,000 and $2,000 respectively to teams in Pakistan from the Lahore University of Management Science and the National University for Science and Technology.

## Projects

2013 **LESIONPLOT** **OLVECZKY LABS**

**MATLAB**
This program makes a plot of the entire rat brain or of each slice to show the damaged area. It was built to analyze the brain damage done to the rats in the course of the experiment so the researchers could make an accurate and explicit claim as to the capabilities of the rats.

2013 **RATSIGS** **OLVECZKY LABS**

**JAVA/ANDROID/PYTHON**
In this app, signatures are recorded as input and then through primary component analysis shown be highly stereotyped. The program is a work in progress but is intended to be a presentation tool.

2013 **MINI-MATHEMATICA PACKAGE** **Final Project – CS51**

**PYTHON**
This is a downloadable package to compute various matrix function in interesting or logarithmically quicker times. My responsibilities included a generic helper module that my teammates could call for their functions to stay behind our abstraction barrier and the eigenvalues module. For example, I implemented determinant using QR decomposition which reduces the time of computation from O(n!) of the naïve implementation to O(n^3).