# Vivek Ramanujan

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## EDUCATION

### BROWN UNIVERSITY
Sc. B in Computer Science | AB Astrophysics
Expected May 2018 | Providence RI
AI Focus

### UNIVERSITY OF WASHINGTON - SEATTLE
BS in Computer Science
2014-2015
CSE Department, Dean's List (All)
Major GPA: 3.95 / 4.0

### THOMAS JEFFERSON HS
Grad. July 2014 | Federal Way, WA
GPA 4.0/4.0

## SKILLS

### PROGRAMMING
Experienced:
Python • Haskell • Java • LaTeX
Intermediate:
Lua + Torch• MATLAB • C • C++ • Shell
Basic:
Android • Processing • Arduino • Assembly

## COURSEWORK

### UNDERGRADUATE
Intro to CS I and II
Hardware Software Interface (C and Assembly)
Theory of Computing
Unix Tools and Scripting
Programming Languages

### CURRENTLY TAKING
Computer Vision
Artificial Intelligence Applications
Cryptography
Analysis of Algorithms

## LINKS

Github:// **RamanvProjects**
Personal:// **vivekr.me**
LinkedIn:// **Vivek Ramanujan**

### INTERESTS
Cycling • Machine Learning • Tennis • Chess • Star Gazing

## RESEARCH & CLUBS

### HCR LAB | Human Centered Robotics Lab Research Intern
Sep 2014 - Present | Seattle, WA
- Worked with the PR2 robot to develop computer vision algorithms. Included use of Canny Edge Detection and OpenCV to create efficient facial detection and recognition applications.

### UBICOMP LAB | Ubiquitous Computing lab High School Intern
May 2013 – Sep 2013 | Seattle, WA
- Implemented Deep Neural Networks for data analysis purposes.
- Worked on project to use machine learning techniques (including Naive Bayesian Classifiers) to analyze skin patches

### MOTION AND CONTROL SYSTEMS LAB | Undergrad Researcher
May 2015 - Present | Seattle, WA
- Utilized a Myo and Machine Learning algorithms to track muscle actuation with which to translate to a remotely controlled robotic arm.

### ROBOTICS CLUB | Programming
Sep 2014 - Mid 2015
- Worked to on the programming team for Robotics to prepare a robot for a competition in May 2015. Utilized mostly C and C++ with Arduino

## PROJECTS

### WIKIPEDIA NETWORK | Data-Mining Wikipedia as a Graph
Jan 2015 – Present | Seattle, WA
- Utilized python and NLTK (Natural Language Toolkit) to generate a graph of Wikipedia, allowing weights for connections between important articles using the PageRank algorithm and A* heuristics.
- Allows one to search for information quickly and find highly related article

### LIFE SOUP | Artificial Neural Networks in Analogue Systems
Oct 2013 – Present | Seattle, WA
- Used Artificial Neural Networks in a highly analogue life simulation to show natural speciation (specialization) of optimal strategies.
- Created a classification algorithm that utilized a Naive Bayesian Classifier and the HyperNEAT algorithm which would produce optimal results faster than normal RNNs.

## AWARDS

| | | |
|---|---|---|
| 2013 | top 4 | Nationals, Logic and Set theory |
| 2014 | top 15 | Nationals, Discrete Mathematics |
| 2014 | top 15 | Nationals, Computer Science |

## SOCIETIES & LEADERSHIP

| | | |
|---|---|---|
| 2014 - Present | College | Dean's List |
| 2015 - Present | National | The Society for Collegiate Leadership & Achievement |
| 2015 - Present | National | National Society of Collegiate Scholars |
| 2014 - Present | College | Engineers without Borders |
| 2012 - Present | National | UNICEF |