

# Vijay Pillai

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## EDUCATION

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**Cornell University**, Cornell Tech, New York, NY  
Master of Engineering in Computer Science

**Expected May 2018**

**Bard College at Simon's Rock**, Great Barrington, MA  
**Harvard Summer School**, Cambridge, MA  
Bachelor of Arts in Computer Science  
Associate of Arts

**May 2017**

**May 2015**

*Selected Coursework:* Networked and Distributed Systems • Applied Machine Learning • Virtual and Augmented Reality • Product Studio • Machine Learning and Neural Nets • Artificial Intelligence • Combinatorial Algorithms • Discrete Math • Computer Gadgets and Digital Media • Graph Theory and Combinatorics • [Algorithms and Data Structures]

*Undergraduate Work Experience:* Tutor for Intro to Computer Science, Tutor for Algorithms and Data Structures, Tutor for Object Oriented Programming

## SPECIALIZED SKILLS

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*Programming Languages:* Python, Java, C++, C, C#, JavaScript, PHP, Haskell, SQL, HTML/CSS, Go, 6502 Assembly  
*Tools:* Atom Editor, JetBrains Pycharm, IntelliJ IDEA, NetBeans, QTCreator, Arduino, Git, Github, Atlassian BitBucket, JIRA, Slack, PhpMyAdmin, Filezilla, Microsoft Office, Libre Office, LaTeX, jQuery, Bootstrap, MySQLi  
*Operating Systems:* RedHat and Debian-based Linux (Fedora, Ubuntu, Raspbian, Mint), OS X, Windows  
*Languages:* Spanish (minimal professional proficiency); Malayalam (limited working proficiency)

## ENGINEERING EXPERIENCE

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**Fullstack Developer (intern)**, *Outer Journey*, Great Barrington, MA

**35hrs/week, Summer 2016**

- Worked on a small team to develop web application prototype
- JavaScript/AJAX/jQuery/Bootstrap front-end, PHP/SQL back-end
- SQL database management
- Session security

## RELEVANT ACADEMIC PROJECTS

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**A Low-Cost, Feature-Based Color Threshold Selection Approach to Eye-gaze Tracking and a Basis For Gaze Interface**

*Senior Thesis, Bard College at Simon's Rock*

**Spring 2017**

- Modified a consumer-grade camera for infrared eye tracking within a \$200 budget
- Developed functional software for eye tracking using novel methods
- Wrote report explaining methodology for IRB review
- Tested software on human subjects following IRB review

**A Feature-Based Color Threshold Selection Approach to Pupil Tracking**, 2017 IEEE MIT URTC

**June 2017**

- Accepted

## LEADERSHIP EXPERIENCE

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**Founder and Co-President**, *Simon's Rock Computer Science Club*, Great Barrington, MA

**Fall 2015 - Spring 2017**

- Created student body for encouraging the pursuit of knowledge and involvement in computer science
- Aided growth of college computer science department
- Co-organized hackathon with Google on social change and open data for students (attendance 60+)

**Teacher's Assistant**, *Intro to Philosophy*, Jinan University, Guangzhou, Guangdong, China

**Summer 2014**

- Provided teaching assistance to ~70 undergraduates

## ACTIVITIES/INTERESTS

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ukulele, 1/64 scale model collector, RPG video games, DIY projects