# RAHUL NATH

Cell: (516)-491-9232 | Email: rahul.nath@williams.edu | Website: http://rahul-nath.github.io

### Education

Williams College, Williamstown, MA Glen Cove High School, Glen Cove, NY Computer Science and Economics; B.A. candidate, 2015 Valedictorian of the Class of 2011

#### Experience

### Honors Senior Research – Williams College

"Learning Domain Models from Partially Observed Action Sequences"

Sept. 2014 - Dec. 2014

• Leveraged Selenium, multiprocessing, and text mining procedures to extend the LOCM knowledge engineering algorithm to learn domain models from sparse descriptions of action sequences in a single agent setting (*Python*)

# Student Contractor - Naval Research Laboratory/Knexus Research, Washington DC July 2014 - Sept. 2014

- Reduced prepositional and word-sense ambiguity in interpreted speech using contextual information in conjunction with Naïve Bayes, Yarowsky's algorithm, and other semi-supervised machine learning techniques (*Lisp, Python*)
- Accelerated and improved accuracy of abductive reasoning for autonomous agents by using a weighted Markov Logic Network as a constraint solver, facilitating goal-driven autonomy for the agent (*Python*)
- Co-authoring paper, "Learning Action Models in a Multi-Agent Context", with Matthew Molineaux (Knexus Research) and David Aha (NRL), detailing results of research for the Autonomous Squad Member project (ASM)

## Software Engineering Intern - Mobiquity Inc, Wellesley, MA

*May* 2014 – *July* 2014

- Integrated cutting edge technology like iBeacons, Google Glass, and Raspberry PIs into Android apps (Java)
- Solidified server-client interactions between devices for Mobiquity's deltaIQ<sup>TM</sup> platform (*Node.js, Java*)
- Conceptualized the UX, UI, and business logic for prototype applications in the Innovations Lab (R & D)
- Utilized Amazon Web Services (EC2, DynamoDB, S3, Kinesis, and Cognito)

# **Teaching Assistant – Williams College Computer Science Department**

Sept. 2013 – Sept. 2014

- CSCI 136: Data Structures and Advanced Programming
- Instructed and graded students on lab problems regarding data structures and advanced programming methods

## Software Developer Intern – Middlebury Interactive Languages, Middlebury, VT June 2013 – August 2013

- Utilized CMU Sphinx4 to develop a speech recognition plugin for company's language learning software (Java)
- Debugged products and documented improvements to the technology and business approach

## Student Technology Consultant – Office of Informational Technology, Williams College Sept. 2012 – Present

Diagnosed and solve software problems affecting the Williams College student community

### Programming, Software, and Language Expertise

- Main Languages: Python | Java | C | Lisp
- Proficiency in: Ruby on Rails | Android App Dev | x86/ARM | Unix/Bash | Scala | ML
- Skilled with: STATA | R statistical software | LaTeX | Node.js | HTML/CSS | SOLID | Git | AWS
- Amazon Web Services Business Professional Accreditation
- Bengali (Fluent: S), Spanish (Intermediate: R, W, S), French (Beginner: R, W, S)

#### **Activities, Leadership, and Academic Accomplishments**

- Dean's List at Williams College
- Class of 1960's Economics Scholar
- Conceptualized annual "Pay it Ephward Silent Auction" event.
  Over \$3000 raised since inception. Proceeds go to the Berkshire Food Project.

•	Co-Founder and President, Williams Strength Club	2014 – present
•	Developer, Williams Student Online Executive Board	2013 – present
•	The Williams Octet (a cappella group)	2013 – present
•	Webmaster, WCFM Radio Executive Board	2012 – present