

# Samuel Jack Hill

207 N Granby St., 23220 Richmond VA  
Cell: +804 349-8808 Email: [whatinthesam@gmail.com](mailto:whatinthesam@gmail.com)  
website: [www.samueljackhill.com](http://www.samueljackhill.com)

## Education

Furman University, Greenville, SC  
B.S.: Computer Science

Expected Graduation: May 2016  
GPA: 3.56

## Relevant Coursework

Intro to Computer Science, Intro to Computer Programming, Data Structures & Algorithms, Discrete Structures, Computer Organization, Information Structures, Database Management Systems, Web-Based Application Design, Computer Graphics & Image Processing, Parallel Programming, Artificial Intelligence, Computational Theory, Statistics, Analytic Geometry/Calculus II, Vectors and Matrices, Music Technology, History of Technology & Discovery

## Research Experience

Summer 2015 – Sea Semester, Phoenix Islands, Boston University

- Sailed from Hawaii to American Samoa through the Phoenix Island Protected Area
- Oceanographic and marine policy research; created models of an underground sea mountain and assessed current flow and ocean productivity

Summer 2014 – Department of Classics, Furman University

- Worked with Dr. Christopher Blackwell on Digital Humanities and Botany research
- Attended two-week seminar at Harvard University's Center for Hellenic Studies to work on digitizing the *Illiad*.

Fall 2013 – Spring 2016 – Department of Computer Science, Furman University

- Worked with Dr. Andrea Tartaro, Computer Science and Dr. Kerstin Blomquist, Psychology, on my thesis project; a Human Computer Interaction research project titled Self Monitoring Innovations (SMI).
- Worked with Dr. Andrea Tartaro on the Big Science project; a study of collaboration amongst scientist using data mining and machine learning techniques.

Summer 2013 – Department of Biology, University of Richmond

- Developed a program and database to evaluate transcriptome RNA sequencing data
- Evaluated gene expression networks and profiles using bioinformatics approaches

## Work Experience

Fall 2014 - Spring 2015: Catron Development, web application development on

Fall 2014 - Spring 2015: Homer Multitext Project editor

Fall 2013 - Spring 2016: Music Theory and Music Technology Teaching Assistant, Music Department, Furman University

Fall 2013 - Spring 2016: Lab Assistant, Department of Computer Science, Furman University

Fall 2013 - Fall 2015: Teaching Assistant, Introduction to Computer Science through Bioinformatics with Departments of Biology and Computer Science, Furman University

Fall 2012 - Spring 2016: Recording Engineer, Department of Music, Furman University

## Awards

- Furman Fellow, Class of 2016
- Merit Award Scholarship, Sea Education Association, Summer 2015
- Heatherington Scholarship, Computer Science Department, Furman University, 2014
- Associated Colleges of the South, ACS Fellowship, Furman University, 2012-2016

## Activities

- Manuscript accepted, Digital Humanities, 2015
- Founder and President, Makers Club, Furman University, 2014-2016
- President, Religious Council and SGA Representative, Furman University, 2015-2016
- Vice President, Secular Students Alliance, Furman University, 2014-2016
- Representative, Religious Council, Furman University, 2014-2015
- Furman Singers, premier collegiate ensemble, Furman University, 2012-2016
- Bell Tower Boys, male a cappella group, Furman University, 2012-2015 (Vice President, 2015-16)
- Manuscript Club, 2012-2016

## Presentations

Conn T, **Hill S**, Dr. Tartaro A (2014) "BIG Science; A Collaborative Framework for Large Scale Research" 2016 South Carolina EPSCoR Annual Conference in Columbia, South Carolina

**Hill S** (2015) "Self Monitoring Innovations: Accuracy Study" Consortium for Computing Sciences in Colleges Sixteenth Annual Southeastern Small College Student Research Contest in Roanoke, VA – received 3<sup>rd</sup> place

**Hill S**, Brown K, Morgan A, Cirstea A, Mustafa A, Dr. Tartaro A (2015) "BIG Science; Towards A Collaborative Framework for Large Scale Research" Furman Engaged Day, Furman University

**Hill S** (2015) "Self-Monitoring Innovations: Accuracy Study" Furman Engaged Day, Furman University

**Hill S**, Eells E (2015) "Minor Differences - Quantifying the impact of 19th century editions on one play by Aeschylus." Furman Engaged Day, Furman University

**Hill S**, Brown K, Morgan A, Cirstea A, Dr. Tartaro A (2014) "BIG Science; A Collaborative Framework for Large Scale Research" Association for Computing Machinery Group 2014 Conference, Sanibel Island, Florida

**Hill S**, Brown K, Morgan A, Cirstea A, Dr. Tartaro A (2014) "BIG Science; A Collaborative Framework for Large Scale Research" 2014 South Carolina EPSCoR Annual Conference in Columbia, South Carolina

Heist T, **Hill S** (2014) "Python as a tool for parsing biological datasets: a case study with transcriptomes from *Cliona varians*." University of Richmond, School of Arts and Sciences Student Symposium, Richmond, VA.

**Hill S** (2014) "Digital Aristotle: A Greek Language Parser" Furman Engaged Day, Furman University

**Hill S**, Schosky R, Dr. Tartaro A (2014) "Bootstrap + Cake: A new look for Self Monitoring." Furman Engaged Day, Furman University

Heist T, **Hill S** (2013) "Python as a tool for parsing biological datasets: a case study with transcriptomes from *Cliona varians*." HHMI Undergraduate Research Symposium, Richmond, VA.

## Skills

**Languages:** Python, Tkinter, numpy, matplotlib, Java, HTML(5), CSS(3), Javascript, Bootstrap 3, ThreeJS, JQuery, PHP, SQL, MySQL, MongoDB, PostgreSQL, SPARQL, Git, Markdown, Command Line, bash, XML, C, mpi, MIPS Assembler, Prolog, Perl, R, Max/MSP

**Tools:** Mac, Windows, Unix, Github, FileZilla, Vagrant, SublimeText 2, Oxygen XML Editor, MAMP/LAMP, Ableton, Finale, Wordpress, Microsoft Access, Oracle, Producteev, Toggl, Ocean Data View, Blast2Go, Rollbar, Logisim, QtSpim

**Laboratory:** DNA extraction, Gel Electrophoresis, PCR, Chlorophyll filtration

**Field:** Scuba, ADCP system, Oceanographic research equipment operation such as CTD-Carousel or Batwing, Trucker Trawl, and Neuston Net deployments