# Samyukta Venkat

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## EDUCATION

**University of Virginia**, Charlottesville, VA
PhD Candidate, Computer Engineering — *Expected May 2020*
GPA: 3.94
Bachelor of Science, Computer Engineering — *May 2018*

## RELEVANT EXPERIENCE

*TwinThread* — *Summer 2019*

- Full-stack development of video help panel to assist customers in using the product, removing the need for each customer to be walked through common issues
- Worked on omni-search feature for quickly navigating product site, and modularized its logging implementation
- Converted controller functions from MVC to WebApi to allow customers to easily consume API

*Teaching Assistant (Digital Logic Design, Science of Information, Mariobots)* — *January 2016 – May 2018*

- Created quiz and studio problems, and prepared a guide for students to better understand class software
- Ran weekly studios and labs, held office hours, and graded quizzes and exams

*United Nations Foundation, Energy Future Coalition (EFC) – Washington DC* — *Summer 2016*

- Constructed a database which cataloged thousands of utilities and agencies and dozens of policies for a website where users could easily access data about their energy legislation based on their location
- Composed daily tweets for multiple EFC twitters to keep readers up-to-date on latest grid and utility technology

*Solar Car Team* — *September 2015 – Dec 2017*

- Involved with team start-up and attended race in Austin, TX to gather knowledge from established teams
- Researched and found components to be used in car and determined what could be salvaged from existing parts
- Guided younger students through workshops on basics of circuits and microcontroller programming

## PROJECTS

*Embedded Systems Research* — *Jan 2019 – June 2019*

- Worked on Tock, a secure embedded operating system for resource constrained computing written in Rust
- Ported Tock from ARM to RISC-V to future proof Tock as many board developers are interested in RISC-V
- Presented poster at Secure Internet of Things Meeting in Santa Cruz, Calif.

*Brain Controlled Drone* — *December 2017*

- Wrote UART code to stream data from processing board to LabVIEW, increasing stream rate
- Architected and implemented LabVIEW system code for integration and testing

*Roadrunner Robot* — *May 2017*

- Created a 'Roadrunner' robot to flee the Coyote and make sounds using LabVIEW Vision Assistant on a myRIO
- Implemented a vision algorithm unaffected by light that registered images with high accuracy
- Strategically placed each sampling loop to avoid distortion on audio playback

## TECHNICAL SKILLS

Programming Languages:

- C/C++/C#
- Java
- Python
- LabVIEW
- SQL
- Javascript

Other:

- Git
- HTML/CSS
- Multisim/Ultiboard
- Django
- VHDL
- Datadog
- ROS
- Matlab
- Cypress
- CircleCI
- AWS

Certifications:

- LabVIEW CLAD Certification

## VOLUNTEER WORK

*HackCville – Social Entrepreneurship Program* — *September 2016- December 2016*

- Facilitated community project involving the construction of a contemplative garden, learned about social entrepreneurship through workshops, and built a website for the garden project using the WordPress platform

*Madison House Music Resource Center* — *October 2014- May 2017*

- Gave voice lessons and provided mentorship to young women at MRC in downtown Charlottesville