

# Tanya Sonker

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## EDUCATION

### SANTA CLARA UNIVERSITY

#### BSC IN COMPUTER SCIENCE

Expected June 2020 | Santa Clara, CA

Emphasis in Software

College of Arts and Sciences

### JAMNABAI NARSEE

#### INTERNATIONAL SCHOOL

#### INTERNATIONAL BACCALAUREATE

Grad. June 2016 | Mumbai, India

## SKILLS

### PROGRAMMING

Proficient:

C++ • SuperCollider

Working Experience:

HTML • CSS • JavaScript • Node.js

• Go • Docker • C • Git • Python

• Java • Scala

Familiar:

• MySQL •  $\LaTeX$  • Kubernetes

## COURSEWORK

### COMPUTER SCIENCE

Experimental Sound Design in

SuperCollider

Santa Clara Laptop Orchestra

Programming Languages

Theory of Algorithms

Data Structures

Object Oriented Programming

(Teaching Assistant)

Introduction to C++

(Former Teaching Assistant)

### MATHEMATICS

Probability + Statistics

Discrete Mathematics

Linear Algebra

Calculus

### ENGINEERING

Community-Based Engineering Design

STEM Outreach in the Community

Computer Networks

Introduction to Embedded Systems

Introduction to Logic Design

## LINKS

GitHub:// [tanya-sonker](#)

LinkedIn:// [tanya-sonker](#)

SCCode:// [tsonker](#)

Maker:// [efolio](#)

## EXPERIENCE

### SOFTWARE ENGINEER INTERN | THE FABRIC

June 2019 - Present | Santa Clara, CA

- Rebuilding an **existing** microservices demo web application for a Cloud/IoT security startup in stealth mode backed by **The Fabric**.
- Redesigned UI elements and developed the front-end of the **revamped demo**.
- Improved the demo by designing and implementing text receipt functionality using the Twilio REST API.
- Debugged to eliminate high/critical security vulnerabilities and minimize low security vulnerabilities in package dependencies.
- Working with this open-source project required knowledge of web development and related frameworks, microservices, HTTP protocols, Go, Docker, and Git.

### CS TEACHING ASSISTANT | SANTA CLARA UNIVERSITY

Jan 2018 - June 2019 | Santa Clara, CA

- Taught programming concepts and helped debug about 15 students' C++ code every lab session.
- Weekly met with and aided Dr. **Natalie Linnell** and another TA with CSCI 60 [Object Oriented Programming] and CSCI 10 [Introduction to C++] labs.
- All SCU undergraduate courses are taught solely by faculty and so, students can only be hired as Lab Teaching Assistants.

### SOUND DESIGNER | SANTA CLARA LAPTOP ORCHESTRA

Jan 2018 - Present | Santa Clara, CA

- Code synth definitions and experiment with and live code algorithmic compositions in SuperCollider to perform electronic music pieces for school's Laptop Orchestra [ **SCLOrk** ]
- 1 of 4 students chosen to be in Dr. **Bruno Ruviano**'s pilot program to extend **SCLOrk**'s performance from one quarter on-campus to the entire academic year and off-campus.
- Collaborate with Google developers and local musicians on compositions.
- Diversify ensemble by referring prospective female ensemble members.

## PROJECTS

### SOUND DESIGN WORKSHOP CREATOR | R F KENNEDY

#### ELEMENTARY

Feb 2019 | San Jose, CA

- Developed and conducted a workshop on Granular Sampling with 24 of R F Kennedy Elementary's 5th and 6th graders.
- Created the **code** for each sample which included creating a synth definition to load audio samples and Pbinds to define parameters to control aspects of samples like playback rate, duration, etc.
- Developed workshop to adapt to restraints introduced by a lower socio-economic environment such as a lack of computer literacy, loudspeakers, headphones, and strong internet connection.

### MAKER | ROCKETSHIP MOSAIC ELEMENTARY SCHOOL

Jan 2018 - Apr 2018 | San Jose, CA

- Led Research and Development in a team of three to build a **Little Free Library** (public bookcase) for a school which lacked a library.
- Designed and built components and interior build of the library by studying comparative models available on the market and assisted in prototyping in CAD.