

# SHM GARANGANAO ALMEDA

is an artist and computer science researcher seeking graduate opportunities to further develop their passion for Human Computer Interaction and Computer Graphics.

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## EDUCATION

### The College of New Jersey

*B.S. in Computer Science, Fine Art Minor*  
August 2016 - May 2020  
GPA 3.776/4

## INVOLVEMENT & HONORS

### Upsilon Pi Epsilon, The Computer Science Honors Society

*Chapter President (2019-Present)*

### TCNJ Diversity and Inclusion Group in Tech for All (TCNJ DIGIT.all)

*President (2019-Present)*  
Improved new member retention and campus involvement by spearheading rebranding effort for better inclusivity.

### TCNJ Association for Computing Machinery (TCNJ ACM)

*Vice President (2019-Present)*

### HackTCNJ Organizer

*2017 • 2018 • 2019*

### First Place: SIGCSE 2019 ACM Student Research Competition

### Anita Borg Foundation Grace Hopper Scholar 2018

### Adobe WIT Scholarship Recipient 2019

### CRA-WP Grace Hopper Scholar 2019

### TCNJ CS Department Award *2016-2017 • 2017-2018 • 2018-2019*

## RESEARCH

### Accessible Sign Language Recognition *January 2018 - Present*

*Mentor: Dr. Andrea Salgian, TCNJ*

- Pursue interest in accessible computing, developing a Sign Language Recognition program using the LeapMotion hand-tracking Python/C++ APIs
  - Train underclassmen researchers to assume and build upon the project
- Poster Awarded 1st Place: *SIGCSE 2019 ACM Student Research Competition*  
Published in: *SIGCSE '19 Proceedings of the 50th ACM Technical Symposium on Computer Science Education*

### bPigment: A Digital Color-Mixing Model *June 2019 - Present*

*Mentors: Jose Echevarria & Stephen DiVerdi, Adobe Research Labs*

- Implemented a novel color-mixing model that both emulates the behavior of pigments and produces effects unique to existing color-blending technology.
- Developed graphical painting app bPigment using Python with PIL and Tkinter to demonstrate the new color-mixing technology.

*Preparing publication for Eurographics 2020*

### Algorithms for Protein Variant Library Design *June 2018 - May 2019*

*Mentor: Dr. Dimitris Papamichail, TCNJ*

- Participated in a research team developing computational biology algorithms
- Developed a tool in Java to minimize costs of protein synthesis

Research funded by:

- TCNJ MUSE Program Summer 2018
- Computing Research Association for Widening Participation (CRA-WP) CREU Program 2018-2019, supported by NSF

Poster Presented At: *Grace Hopper Celebration 2019 Poster Session*

## EXPERIENCE

### The College of New Jersey

Undergraduate Researcher ..... *January 2018 - Present*

Computer Science Tutor ..... *September 2017 - Present*

- Adapt a deep enthusiasm for computer science to facilitate understanding and appreciation of material while assisting peers in mastering course content

### Adobe Research Labs – Computational Artistry Team

Research Intern ..... *June 2019 - August 2019*

### Freelance Digital Artist

*2012 - Present*

- Effectively communicate with clients to create a wide range of promotional materials on commission, exceeding client expectations
- Manage social media campaigns to build and maintain a supportive following, receive customer feedback, and direct traffic to online store

### MakerJam

Co-Founder, Webmaster, Lead Designer ..... *January 2016 - June 2018*

- Worked with local BOE to design and initiate an annual K-12 district-wide "open hackathon" event to promote creativity and collaboration
- Developed and maintained MakerJam website and promotional graphics