

# NACHIKETA GARGI

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## EDUCATION

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### The Nueva School

Aug 2014 - June 2018

FRC Robotics Team 4904, Jazz Ensemble, Programming Club, Music Production and DJ Club

### University of Michigan

Aug 2018 - June 2022 (expected)

*B.S. in Computer Science (expected)*

*B.F.A. in Performing Arts Technology (expected)*

## WORK EXPERIENCE

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### Primity Bio

June 2016 - Sep 2016

*Software Engineering Intern*

- Worked on a web-based realtime, collaborative data analysis platform for clients using test-based development with Node, Angular, and MongoDB.
- This work was presented at an FDA conference in Washington, D.C.

### YouSound

June 2017 - Present

*Full Stack Developer*

- Created a scaleable chat platform to accompany the rest of the site using Node and socket.io, deployed on AWS.
- Researched and documented setup instructions and assisted in implementation for a web-scale video live-streaming platform (like twitch.tv) using AWS Elemental MediaLive, MediaPackage, and CloudFront.

## PROJECTS

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### AutoMuse

Oct 2014 - June 2016

*Automated computer music composition*

Python, Keras

Used markov chains and LSTM neural networks to generate music from a dataset of scraped MIDI files.

### FieldAC

Jan 2018 - Apr 2018

*FRC Robot and Object Localization*

C++, OpenCV, Darknet

As part of FRC team, trained a custom model for an object detection framework (YOLOv3) on game pieces. Created field model that used optical flow in conjunction with YOLOv3, onboard LiDAR, and IMU to estimate pose of robot and game pieces on the field. Model was used for an autonomous routine to manipulate the nearest game piece.

## SKILLS

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Programming Languages	JS, Python, Go, Bash, C++, Java, Max/MSP
Creative Software	Ableton Live, After Effects, Photoshop, Logic
Other	Markdown, AWS, GCP, Git, Slack, Trello