

# Berthy T. Feng

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## EDUCATION

### Princeton University

Princeton, NJ, Class of 2019

- BSE Candidate in Computer Science, GPA: 3.89 / 4.0
- Selected Courses: *Algorithms and Data Structures*, *Programming Systems*, *Reasoning about Computation*, *Computer Vision*, *Computer Science: An Interdisciplinary Approach*, *Computer Music*

### Laurel School

Shaker Heights, OH, Class of 2015

- Lyman Prize (Valedictorian), Cum Laude, Phi Beta Kappa Award, National AP Scholar, National Merit Finalist, Ohio State Champion in U.S. Extemporaneous Speaking, Quarterfinalist at National Speech & Debate Tournament

## TECHNICAL SKILLS

Programming Languages: Java, Python, Swift, C++, Objective-C++  
Data Analysis: R, Stata  
Additional Tools: Django, Git, Max/MSP

## WORK EXPERIENCE

### Professor Claire Gmachl (Electrical Engineering), Research Assistant

Princeton, NJ, Summer 2017

- Created Pixplor, an “intelligent photo album” iPad app for nursing-home residents with dementia. Pixplor learns user preferences to recommend photos from a database of 5+ million images.
- Developed computer vision and machine learning components, including emotion recognition, gaze tracking, and recommendation algorithm.
- Wrote server-side code to process client requests using Django REST framework.
- Wrote client-side code in Swift and Objective-C++.
- Will continue to improve the app after introducing it in local nursing homes and memory care centers.

### Longbow Research, Equity Research Intern

Cleveland, OH, Summer 2014 / Winter 2016

- Developed earnings model to forecast Fossil Group’s two-year stock performance using quantitative margin analysis and growth rate analysis.
- Researched foodservice equipment companies to lay groundwork for analyst coverage.

### U.S. Senate Banking Committee, Policy Intern

Washington, DC, Summer 2016

- Collaborated with national security policy team of Senator Sherrod Brown’s staff on U.S. Senate Committee on Banking, Housing, and Urban Affairs.
- Researched and drafted reports on money laundering and human trafficking.

## SELECTED PROJECTS

### Emotionally Intelligent Slideshow (<https://github.com/berthyf96/SlideshowDemo>)

Summer 2017

- Created a demo for Pixplor of an iOS app that allows users to flip through pictures while generating user response data, including emotion as recognized from a real-time camera feed of the user’s face.
- Wrote an Objective-C++ wrapper class to allow use of OpenCV library in Swift.

### Drum Pad ([https://github.com/berthyf96/sampling\\_pad](https://github.com/berthyf96/sampling_pad))

Spring 2016

- Created a sampler (drum pad) for musicians to upload audio samples and play the pad as an instrument.
- Used piezoelectric sensors to send touch pressure data to an Arduino script and Max/MSP patch.

## LEADERSHIP AND ACTIVITIES

### HackPrinceton, Marketing Director (Organizer pre-2017)

Fall 2016 – present

- Lead Marketing team to promote semiannual, 500+ student hackathon to students, sponsors, and mentors.
- Volunteered on dev team to refactor HackPrinceton’s website code.

### Forbes College, Peer Academic Adviser

Fall 2016 – present

- Advise group of current freshmen on course selection, career preparation, and general academics.

### Music Production (<https://soundcloud.com/berthy-feng-1>)

- Produce electronic music using a mix of audio recording, analog synthesis, and digital synthesis.