

# Shashank Aswathanarayana

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Creative, persevering and results oriented graduate student, looking for a position in audio research, which can combine my passion for music and digital audio with my skills in audio signal processing and programming.

## Education:

University of California, Santa Barbara (UCSB), CA

**PhD Student, Media Arts and Technology, GPA – 3.87\***

Sept '16-Present

New York University (NYU), New York, NY

**Master of Music, Music Technology, GPA - 3.59**

May, 2014

Key Courses: 3D Audio, Music Information Retrieval, Advanced Digital Signal Theory, Perceptual Audio Coding, Psychology of Music, C-Programming for Music Technology

Visvesvaraya Technological University, Bangalore, India

**Bachelor of Engineering, Electronics and Communication, GPA - 3.5 (First Class)**

June, 2012

## Skills:

- Python, Matlab, C/C++, Numpy, Scipy, Scikit-learn, Essentia, Vagrant, SPSS, Max/MSP, Pro Tools.

## Publications:

- **Effect of a Known Environment on the Estimation of Sound Source Distance.** By Shashank Aswathanarayana. In Audio Engineering Society Convention 142, Audio Engineering Society, May 2017.
- **I Hear Bangalore3D: Capture and Reproduction of Urban Sounds of Bangalore using an Ambisonic Microphone.** By Shashank Aswathanarayana and Dr. Agnieszka Roginska. Proceedings of the International Conference on Auditory Display (ICAD), 2014.

## Work Experience:

**Engineer, Humtap Inc., San Francisco, CA**

July '14-May '16

- Research and Development in music information retrieval, specifically focusing on music content analysis by extraction and interpretation of musical features such as rhythmic structure, pitch detection, segmentation.
- Developed automated analysis of large databases of musical material matching human perception and media exports to third party REST APIs.
- Implemented an automatic evaluating mechanism for sound files generated from the App.
- Evaluated various music content analysis algorithms and implemented prototypes.

**Research Assistant for Dr. Morwaread Farbood, New York University, NY**

Feb '13-May '14

- Cross-Cultural perception of Indian Classical Music. Analyzing the emotional responses of Western listeners to Indian Classical Music.
- The aim was to see if people unfamiliar with a genre could perceive intended emotions of the music.

## Project and Research Experience:

• **Master's Thesis: An Automatic Music Performance Analysis System**

Oct '13-May '14

- Designed and implemented a prototype to aid singers in getting visual and audio feedback during practice.
- Assessed the performance of the prototype by conducting a subjective study with students at NYU.

• **Score Following using DTW Algorithm**

Oct '13-Dec '13

- Designed and implemented a score following system in Matlab that performs audio-audio alignment using the dynamic time warping algorithm approach.

## Awards/Achievements:

- Performed and conducted a workshop, "3D Environments" at the 135<sup>th</sup> AES Convention (Oct 2013). Workshop on distributed/network performance using wavefield synthesis to establish a connection between New York and Norway.
- Volunteer in 3 NGOs in India for **over 17 years** involved in the education, environment & healthcare sectors.
- Trustee of **Spandana NGO Trust** which helps government school children realise their educational dreams.