

Fanbo Xiang

Present Address: 1007 W Clark St Apt 21, Urbana, Illinois 61801, USA
fxiang2@illinois.edu • +1 (217) 979-0754 •

EDUCATION

University of Illinois at Urbana Champaign, Champaign, IL

- Bachelor's degree in Computer Science
dual degree in Mathematics
• Cumulative GPA: 4.0/4.0
- Computer Science Coursework
 - CS440 Artificial Intelligence A+ CS412 Intro to Data Mining A+
 - CS418 Interactive Computer Graphics A+ CS421 Programming Languages A+
 - CS241 System Programming A+ CS374 Models of Computation & Algorithms A+
 - CS450 Numerical Analysis A+
- Mathematics Honor Courses
 - MATH416 Abstract Linear Algebra MATH427 Abstract Algebra Math424 Real Analysis

Expected Graduation:
May 2018

ACADEMIC AWARDS

- Dean's List, Fall 2014 through Fall 2015, Division of General Studies 2014 – 2015
- James Scholar, Division of General Studies to College of Engineering Aug 2014 – Present
- Honorable Mention in UI Freshman Math Contest Sep 2014

EXPERIENCE

Computer Science Course Assistant, Champaign, IL

- CS 125: Intro to Computer Science Aug 2015 – Dec 2015
- CS 374: Intro to Algorithms & Models of Computation Aug 2016 – Present
 - Learn directly from professor and TAs how to effectively teach students and explain complex topics.
 - Learn how to collaborate in a faculty team to teach and improve a course.

Individual Projects, Champaign, IL

- Chord Analysis Project Dec 2014
 - <https://github.com/fbxiang/music-analysis>
 - Learned basic music theories, Fourier Transform and probabilistic models.
 - Applied the knowledge to estimate harmonic content in a music segment.
 - Currently learning better machine learning models for music analysis.
- Search Plus Chrome Extension July 2016 – Present
 - <https://github.com/fbxiang/SearchPlus>
 - Recognized my inefficiency when interacting with Chrome.
 - Designed a pop up window for multipurpose search in a document.
 - Upgraded the search bar to a in-browser command window.
 - Enabled customizing the popup and quick executing javascript to boost my efficiency.

Sound Prediction from Video Research Project, Champaign, IL

- Research Assistant, Instructed by professor Paris Smaragdis Feb 2016 – Jul 2016
 - Did research on the basis of a physics engine and successfully built a simple 2-D physics engine from scratch.
 - Learned and implemented a simple sound synthesizer to generate sound.
 - Combined video and audio generation to prepare training data for collision model learning.

ACADEMIC ACTIVITIES

Association of Computing Machinery, SigMusic, Champaign, IL

- Active Member Jan 2015 – Present
 - Contributed to interactive graphics and sound exhibits; received positive feedbacks at Engineering Open House.
 - Applied my knowledge in music theories and algorithms to perform music generation.
 - Participated in the entire work flow of these team projects.
 - Designed interfaces to do communication and unification between programs written by different members.

SKILLS

Programming: **Python, Java, Javascript, C++, C#, Ruby, C, HTML, Haskell, MATLAB, LaTeX**
Development: Git, Subversion, Eclipse, Visual Studio
Operating Systems: Linux (Ubuntu), Windows
Computer Game making: familiar with scripting systems of Unity3d and Unreal4.

INTERESTS

Music theories and composing
• <https://soundcloud.com/fanbo-xiang>