Evan Matthews

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EDUCATION

University of Illinois Urbana-Champaign

August 2023 – Present

GPA: 3.33/4.00

M.S. in Computer Science

• Thesis Advisor: Paris Smaragdis

• Topic: Machine Learning for Audio Computation

University of Illinois Urbana-Champaign

August 2019 - May 2023

B.S. in Computer Science + Music

GPA: 3.76/4.00

• FAA James Scholar | Dean's List: Fall 2019, Spring 2020, Spring 2021

• Relevant coursework: Algorithms & Models of Computation, Artificial Intelligence, Computation and Music, Electroacoustic Techniques, Systems Architecture, Data Structures, Database Systems

Research Experience

Bayesian Grading: Analysis of Scores in the Context of Cheating

May 2024

Co-Authors: Victor Zhao, Yuxuan Chen | Advisor: Craig Zilles

• Probabilistic analysis of student grade trustworthiness, given proctored, unproctored exam scores

Nearest Neighbor Classication for Classical Image Upsampling

December 2023

Co-Author: Nicolas Prate

• KNN Interpolation, Dynamic-Ratio and Selective Upsampling to compete with ML methods

Transcribing Monophonic Audio with Deep-Learning Data

May 2023

Co-Author: Kevin Zhou | Advisor: Zuofu Cheng

• Senior Capstone project: develop models to transcribe audio recordings directly into sheet music

EXPERIENCE

Teaching Assistant

January 2021 – Present

 $Graduate,\ Undergraduate$

Champaign, IL

- CS 448: Audio Computing Laboratory | P. Smaragdis (SP 2024)
- CS 340: Intro to Computer Systems | C. Evans (FA 2023)
- ECE 402: Electronic Music Synthesis | Z. Cheng (FA 2022), L. Haken (SP 2021)

Intern

November 2021 – August 2022

Haken Audio | Manager: Lippold Haken

Champaign, IL

- Produced and debugged state-of-the-art MIDI keyboards and controllers
- Received additional training with SHARC audio processors, DSP concepts, MIDI and MIDI controllers

Illinois Tutoring Initiative | Illinois State University

June 2023 – May 2024 Remote

Assist and mentor ninth-grade students virtually in Alegbra I, Geometry

Leadership Experience

Association for Computing Machinery, UIUC Chapter

August 2021 – Present

- Chair, SIGMusic | August 2023 Present
- Treasurer | May 2022 May 2023
- Chair, Social Committee | August 2021 May 2022

Technical Skills

Math Tutor

Languages: Python, C/C++, Java, Rust, OCaml, SQL, TeX/LaTeX, Bend

Frameworks: Flask, JUCE, Hugo

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Zed, PyCharm, IntelliJ Packages: NumPy, SciPy, Matplotlib, PyTorch, Scikit-Learn, Pandas, GDB, Music21

(Updated 5/24/24)