Evan Matthews

(309) 256-9709 | evanmm3@illinois.edu | ematth.dev | linkedin.com/in/ematth/ | github.com/evanmm3

EDUCATION

University of Illinois Urbana-Champaign August 2023 – Present
M.S. in Computer Science

University of Illinois Urbana-Champaign May 2023
B.S. in Computer Science + Music *GPA: 3.76/4.00*
- James Scholar | Fall 2019 – Present
- 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

EXPERIENCE

Undergraduate Researcher September 2022 – May 2023
Research Advisor: Paris Smaragdis
- Constructing a proof-of-concept conversion from text descriptions to accurate music/sounds
- Research goal: finding optimal audio data structures for neural net training

Internship 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

Teaching Assistant January 2022 – May 2022
ECE 402: Electronic Music Synthesis; Professors: Lippold Haken, Zuofu Cheng
- Ran two-hour lab sessions twice a week
- Provided assistance to students on projects and course equipment; graded midterm and final exams

RESEARCH AND PROJECTS

Transcribing Monophonic Audio with Deep-Learning Data January 2023 – Present
Python, MusicXML/MIDI; Advisor: Zuofu Cheng
- Senior Capstone project; funded research project to collect hummed recordings
- Overall goal: develop models to transcribe audio recordings directly into sheet music

DISSCO September 2021 – May 2022
C++, VS Code
- Volunteered as a developer; NCSA-partnered project for the creation of stochastic computer music
- Under the direction of Sever Tipei; used by students of INFO 490

LEADERSHIP EXPERIENCE

Treasurer | *Association for Computing Machinery* March 2022 – March 2023
- Managing all chapter finances, debts and sponsorships
- Financial advisor to HackIllinois and Reflections | Projections
- Leading long-term renovation of ACM's club room

Member | *School of Music Advisory Board; Director: Jeffrey S. Sposato* September 2021 – May 2023
- Represented CS + Music and music technology undergraduate students in decisions and recommendations towards the School of Music

TECHNICAL SKILLS

Languages: Java, Python, C/C++, OCaml, SQL, TeX/LaTeX
Frameworks: Flask, JUCE, Hugo
Developer Tools: Git, Docker, Google Cloud Platform, VS Code, PyCharm, IntelliJ
Libraries: NumPy, Matplotlib, PyTorch, Pandas, GDB, Catch2, Music21, Musx