EVAN MATTHEWS

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SUMMARY

Focused on driving advancements in artificial intelligence and machine learning through the development of signal-based models that optimize workflows and deliver real-time predictions. Proven ability to enhance accessibility and utility of large generative models for diverse audiences. Highly organized and motivated, with strong time management and organizational skills applicable across various environments. Actively seeking entry-level opportunities to contribute to organizational growth while further developing technical expertise.

SKILLS

- PyTorch and Scikit-learn
- Machine learning
- Project management
- Team collaboration
- Attention to detail
- Complex Problem-solving
- Originality and creativity
- NumPy and SciPy
- Pandas and Matplotlib
- Python programming
- C/C++ and Java
- Rust and OCaml
- Web frameworks: Flask and Hugo
- Version control: Git and GitHub
- Audio computation and production
- Documentation: LaTeX and Notion
- Operating systems: Linux, Windows, MacOS

EXPERIENCE

REVIEWER | 05/2025 to Current
IEEE MLSP 2025 - **Remote**

- Provided detailed reports summarizing findings from reviews and analysis.
- Reviewed more than five papers for conference submission.

MATHEMATICS TUTOR | 05/2023 to 08/2025
Illinois Tutoring Initiative - **Normal**, **IL**

- Provided individualized instruction to meet the unique needs of each student.
- Conducted one-on-one tutoring sessions for students who needed extra assistance with mathematics topics.
- Explained difficult mathematical concepts using visual aids, manipulatives, and other interactive tools.

GRADUATE TEACHING ASSISTANT | 08/2023 to 05/2025
University of Illinois, Urbana-Champaign - **Urbana**, **IL**

- Courses: Machine Learning for Signal Processing, Audio Computing Laboratory, Computer Architecture
- Maintained accurate records of student attendance and grades per university policies.
- Graded assignments and exams while providing constructive feedback to students.
- Collaborated with faculty to develop innovative teaching strategies for enhanced learning.
- Fostered a positive learning environment through effective classroom management techniques.

SESSION CO-CHAIR | 11/2024 to 02/2025
CSLSC 2025 - **Urbana**, **IL**

- Organized and led the Machine Learning and Signal Processing (MLSP) session at the 2025 Coordinated Science Lab Student Conference (CSLSC).
- Managed the session's schedule, including the selection of presenters, invited student speakers, and necessary travel accommodations.

TREASURER | 04/2022 to 04/2023
ACM at UIUC - **Urbana**, **IL**

- Assisted in preparing annual budget reports and forecasts for strategic planning.
- Presented financial data at board meetings to enhance decision-making.
- Reviewed accounts payable and receivable activities to ensure transaction accuracy.
- Managed transactions and accounts exceeding $100,000 for two student-run conferences.
- Oversaw event planning for club activities, including recruiting events with 4,000 attendees.

PRODUCT MANUFACTURER | 11/2021 to 08/2022
Haken Audio - **Champaign**, **IL**

- Helped to develop new procedures to increase efficiency and reduce waste in the manufacturing process.
- Manufactured and tested electronic components for the Continuum Fingerboard, a unique electronic music instrument. Managed by Lippold Haken, 'one of five leading individuals to have remodeled the musical human-machine interface since 1900.'

EDUCATION

University of Illinois Urbana-Champaign - **Urbana**, **IL**
Master of Science
Computer Science, **05/2025**

- Thesis Title: Text Recaptioning for Audio Diffusion Models
- Advisor: Prof. Paris Smaragdis
- GPA: 3.62/4.00
- Projects and Research: Output comparison on features of audio/image pairs, lighting consistency analysis in generated images, nearest neighbor classification for classical image up-sampling, optical music recognition for LilyPond file generation, "A Case for Bayesian Grading".

University of Illinois Urbana-Champaign - **Urbana**, **IL**
Bachelor of Science
Computer Science + Music, **05/2023**

- James Scholar, College of Fine and Applied Arts
- GPA: 3.76/4.00 (High Honors)
- Capstone: Transcribing Monophonic Audio with Deep-Learning Data
- Membership: ACM at UIUC, School of Music Student Advisory Board
- Projects: Digital Instrument for Sound Synthesis and Composition (DISSCO), Pan-Lang, real-time echo effects for hybrid electronic/acoustic instruments, graph traversal algorithms for Spotify artists.

LANGUAGES

English:
Native/ Bilingual

Spanish:
Limited

Chinese (Mandarin):
Limited

WEBSITES, PORTFOLIOS, PROFILES

- https://ematth.dev
- https://github.com/ematth