BRENDAN ZELIKMAN

Musician, Programmer, Teacher
brendanzelikman@gmail.com

Objective

I am a strongly motivated alumnus from Princeton University seeking to share and apply my comprehensive talents in music and computer science. I am highly proficient in software engineering with specialization in symbolic music and frontend software. I also have diverse experience in education involving teaching, tutoring, and admissions work.

Education

Princeton University
A.B. Computer Science, *cum laude*
Certificate in Music Performance

Princeton, NJ
09/2019 – 05/2023

Experience

Berkeley Carroll School
Upper and Middle School Admissions Intern

Brooklyn, NY
08/2024 – Present

- Organizing and conducting interviews with prospective students and parents
- Working with associate directors to visit schools and host information sessions
- Consolidating applicant profiles and organizing admissions data for analysis

Berkeley Carroll School
Upper School Math Teacher Leave Replacement

Brooklyn, NY
01/2024 – 06/2024

- Taught four sections of math covering for Algebra II and Adv. Multivariable Calculus
- Prepared original lesson plans, homeworks, and assessments for over 60 students
- Facilitated the school's Math Team and prepared contest problems for mathletes

High Meadows Environmental Institute
Summer Intern / Hurricane Hazards and Risk

Princeton, NJ (Virtual)
06/2022 – 09/2022

- Designed and developed a web visualization for a real-time hurricane forecasting system.
- Worked with graduate students to understand and assess the risks of storm surge.
- Processed live county-level geospatial data forecasted from the National Hurricane Center.

Terrace F. Club
Club Officer / Social Chair

Princeton, NJ
01/2022 – 01/2023

- Presided over the daily operations and responsibilities of a 150-person eating club.
- Brainstormed, planned, and organized weekly events in attendance by hundreds of students.
- Bolstered membership after the COVID-19 pandemic and mentored the succeeding officers.

Princeton Music Outreach
Member + Co-Captain

Princeton, NJ
01/2020 – 01/2022

- Organized community visits and live musical performances at assisted living facilities.
- Balanced the club budget and managed travel arrangements for the group.
- Helped design, edit, and arrange a digital concert during the COVID-19 pandemic.

Presentations

TBD   **"Harmonia: Upgrading the Musicality of the DAW"**
Curtis Institute, in collaboration with Dmitri Tymoczko and Nick DiBerardino.

2024   **"Harmonia: A new tool for making music"**
Princeton University, with Dmitri Tymoczko at the Keller Center Innovation Forum.

2024   **"Harmonia: Music Software with Hierarchical Structure"**
Princeton University, as a guest lecturer for MUS306: Understanding Tonality.

2022   **"Real-time Forecasting System for Hurricane Hazards and Risk"**
High Meadows Environmental Institute, Summer of Learning Symposium.

2019   **"Testing Alternative Presentations of Word Lists with the DRM Paradigm"**
Berkeley Carroll School, 8th Independent Research Conference.

Awards

2023   **Outstanding Computer Science Senior Thesis Prize @ Princeton University**
Awarded to seniors in computer science who have been recognized for their outstanding research.

2021   **Best Social Media Hack @ HackPrinceton**
Awarded $10,000 (sponsored by Neo) for the best social media project coded within 36 hours.

2019   **Alisa F. Levin Award @ Berkeley Carroll School**
Awarded to the high school senior(s) with the highest cumulative grade point average.

Skills

Computer Science:
Software Engineering · Web Development · Data Structures · Computer Graphics · Machine Learning

Music:
Classical Piano Repertoire · Electronic Music Production · Algorithmic Composition · Digital Signal Processing

Math:
Multivariable Calculus · Linear Algebra · Combinatorics · Graph Theory · Computational Complexity

Technologies:
HTML · CSS · JavaScript · TypeScript · React · Redux · Tailwind · Tone.js · Max/MSP · JUCE · C · Python