LANCELOT **BLANCHARD**

Musician - Engineer - Al Researcher MIT Media Lab

present CONTACT 534 Beacon Street, Apt 303 0 Boston, MA 02215 2023 1-617-335-7712 **@** lancelot@media.mit.edu 2022 lin linkedin.com/in/lancelotblanchard lancelotblanchard.com

EDUCATION

2023

- PhD in Media Arts & Sciences, MIT Media Lab
- 2024 MIT Presidential Fellow.
- Research in AI & Music at the Responsive Environments group.

2022

- MRes AI & ML, Imperial College London
- · Visiting student at Fluid Interfaces, MIT Media Lab
- Thesis: Human-Al Co-Reasoning: Augmenting Human Debates with Interactive Neurosymbolic AI Systems

2018

- MEng Computing (AI & ML), Imperial College London
- · Highest Honours, Dean's List and 2018 Entrance Scholarship.
- Thesis: GenFastLAS: Scaling up the FastLAS system to large feature spaces, and application to Symbolic Music Genre Classification

2006 2018

Classical Piano and Music Theory, Conservatory of Rennes

MAIN PROJECTS & PUBLICATIONS

Developing Symbiotic Virtuosity (Published in MIT Press, presented at AES 2024)

Sep 2023 - present

- Work with GRAMMY-winning artist Jordan Rudess to build novel Human-AI Co-Created Live Music Performance.
- · Optimize GPT2-based MIDI generation models for real-time interaction and implement diverse conditioning modalities.
- Recipient of MIT's Generative AI Impact Publication Grant (\$70K).

inHarmony: Community Belonging and Al Choirs (In Preparation for CHI 2025)

May 2023 - Present

- Use SOTA Singing Voice Conversion models (SVC, RVC) to develop interactive AI choirs.
- Study the impact of experience on sense of community belonging and social anxiety.

Living Memories: Al-Generated Characters as Digital Mementos (Published at IUI 2023)

Oct 2022

- Used Semantic Models, LLMs, and Generative AI to construct interactive and compelling digital mementos.
- Co-authored with Pat Pataranutaporn, Valdemar Danry, Lavanay Thakral, and Prod. Pattie Maes (MIT), and Misha Sra (UCSB).

Symbolic Music Genre Classification with Scalable Logic-based Learning (MEng Thesis) • Developed GenFastLAS, an automated logic-based learning system that can efficiently scale to large feature spaces.

- Applied it to the genre classification of symbolic music using novel music theory features.
 Project supervised by Prof. Alessandra Russo. Received Distinction (86%).

EMPLOYMENT HISTORY

Amazon UK - Business Intelligence Engineer

May 2021 - Sep 2021

- Worked as part of the Amazon Pan-EU Fashion Data & Analytics Team. Developed a full internal product to provide interactive action-orientated feedback to customers. Performed ad-hoc data analysis and wrote business reports.
 Worked with React and a wide-range of AWS services (notably Cloudformation, S3, Lambdas, RDS, Redshift, QuickSight)

Privitar - Software Engineer Intern

Jun 2020 - Sep 2020

- · Worked as part of the API Team in order to implement complete APIs for both internal and external use cases.
- · Worked with Java, Spring, and Hibernate for MySQL, PostgreSQL and Oracle databases. Also used data tools such as Apache Hadoop, Apache Hive, Apache NiFi, and Apache Kafka.

SKILLS & INTERESTS

ADDITIONAL EXPERIENCE



Computing

Python, Java, Kotlin, C, C++, Haskell, R, SQL, Vue.js, HTML, CSS, PHP, JS, TS, AWS, GCP, Scikit-Learn, PyTorch, Tensorflow



Languages

French (Native), English (Fluent), Italian, German



Sports



Piano, Guitar, Production, Songwriting, Mixing, Sheet Writing, Synth Design



NYC Marathon Finisher

Boston Al Music Meetup Organizer

Aug 2024 - Present

- · Host monthly meetups for the Al Music community around the Boston area, with academic and industry expert speakers.
- · Collect fundings from industry sponsors including Suno and Meta.

Startup Founder - DJStreamr

Jun 2020 - Sep 2020

- Designed novel technology to synchronize and livestream remote DJ gigs.
- Gained interest of Music Tech companies (Native Instruments) and DJ labels (DEFECTED).

Music Producer, Jazz Pianist

Mar 2016 - Present

- Totalled over 14M streams on streaming platforms.
 Reached Billboard's Top 10 in the Philippines and top tier playlists.
- Received MIT's Emerson/Harris Fellowship to be part of Jazz Ensemble.