Megan Elisabeth Finch
MS Student
Music and Audio Computing Lab (`http://mac.kaist.ac.kr`)
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EDUCATION

KAIST, Daejeon, KR *2022 – 2024 (Expected)*
MS Culture Technology

- Music and Audio Computing Lab (Prof. Juhan Nam)

University of Cambridge, Cambridge, UK *2019 – 2022*
BA (Hons) Computer Science

- Final class: 2:1 (67%). Equivalent to 3.7/4.0 GPA.
- Final-year dissertation on *Inferring Structure from Motion*, an implementation and comparative evaluation of solutions to the 3D reconstruction problem in computer vision.
- Courses include Digital Signal Processing, Computer Music, Artificial Intelligence, Machine Learning, Human-Computer Interaction and Quantum Computing.

EXPERIENCE

inMusic, Cambridge, UK *Jun – Aug 2022*
Software Developer Intern

- DAW integration for a new AKAI MPK series hardware controller, using the scripting APIs for MPC, Logic Pro, Ableton Live, FL Studio and Cubase to send and receive MIDI and SysEx messages.
- Scripting in Python, JavaScript and Lua.

VividQ, Cambridge, UK *Jun – Sep 2020*
Software Developer Intern

- UI design for a new holographic heads-up display (HUD) prototype.
- UI feature implementation for an application that rendered proprietary hologram files in 2D, using C# and ASP.NET MVVM framework, packaged with the VividQ SDK.
- Evaluation of accuracy, delay and robustness of OpenCV (open-source) and Tobii (commercial) eye-tracking solutions in different lighting conditions for the development of a new augmented reality desktop display.

Collins Aerospace, Plymouth, UK *Oct 2018 – Aug 2019*
DevOps Intern

- Database system development using C# with ASP.NET MVC and Entity Framework.
- Engineering Development Trust (EDT) *Contribution to the Business* Award – Winner (South West 2019)
- Plymouth Manufacturing Group *Best Manufacturing Project* Award – Finalist (2019)

RESEARCH INTERESTS

- **Computer Music:** music generation, automated composition and arrangement, sound synthesis, signal processing
- **Machine Learning:** machine learning, deep learning, applied machine learning (vision, image, audio, NLP, etc...)
- **HCI:** human-computer interaction, human-centred computing, affective computing, cognitive science

TECHNICAL SKILLS

- **Languages:** Python, Java, JavaScript, C, C++, C#, OCaml
- **Tools and Libraries:** OpenCV, TensorFlow, music21, jMusic, JUCE, DAW scripting (Logic Pro, Ableton Live, etc...), standard Python libraries (NumPy, SciPy, Matplotlib, etc...)
- **OS:** Unix, Linux, Windows
- **Audio:** DAWs

NON-TECHNICAL SKILLS

- **Languages:** English (native), Japanese (JLPT N5)
- **Music:** Baritone Horn (ABRSM Grade 5), Piano (ABRSM Grade 5), Music Theory (ABRSM Grade 5), Mandolin

COMMUNITY & LEADERSHIP

Cambridge University Brass Band, Cambridge, UK

- 2nd Baritone, *2019–2022*
- Elected Secretary, *2020–2021*
- Elected Social Secretary, *2021–2022*