

Nicholas Arner

330-418-1965 nicholasarner@gmail.com <skype:nicholasarner1> nicholasarner.com

Profile

Specialist in the relationships between Human-Computer Interaction, gestures, and audio. My MSc research at the University of York (2014) focused on the interface and gestural-design preferences of users interacting with music-focused, touch-screen apps. Passionate about intersections between technology and the arts.

Experience

IOS/OS X DEVELOPER, SQUIRRELS LLC; NORTH CANTON, OHIO – JANUARY 2015 - PRESENT

I participated in the development of product release updates including [Reflector 2.1](#) and [Director 2.1](#). I also participated in the development and launch of [Reflector Student](#).

RESEARCH INTERN, FRAUNHOFER IIS; ERLANGEN, GERMANY – OCTOBER 2013 - DECEMBER 2013

I conducted research on sonification of the human heart, specifically using mobile devices. This included research into the topic of variable heart rate, as well as which parameters would be useful in a medical/sports context. I also assisted in the preparation of the 2013 International Sonification Conference that was held at Fraunhofer, as well as co-presented on the topic of "High-Level Audio Programming for Mobile Devices."

MODULE DEMONSTRATOR, UNIVERSITY OF YORK; YORK, UK – 2006-2008

I was a demonstrator for the Audio for Visual Media and Musical C-programming modules. My duties consisted of assisting students while they worked on their assignments and labs.

Projects

AudioKit - I am a core contributor of AudioKit, an open-source audio analysis, synthesis, and processing toolkit for iOS and OS X apps. My contributions to the core code include operation presets and tests. Additionally, I have written the tutorials and example projects on the project website (audiokit.io). My work can be seen on [my GitHub profile](#).

Delay Tracker - I conceived and developed the Delay Tracker iOS app as part of my partnership with High Speed Rail USA. The app allows intercity rail passengers the opportunity to report train delays to the Federal Rail Administration. It can be found on [iTunes](#).

Education

University of York, York, UK - MSc (by research) in Music Technology, 2014
The Banff Center, Banff, AB, Canada - Audio Technology Work-Study, 2012
Capital University, Columbus, OH - BA in Music Technology, 2012

Skills

My development skills include experience with Objective-C, Swift, C/C++, and Python. Proficient in several platforms and applications including: PaintCode, ProTools, Ableton Live, Fritzing, and Office. I am also experienced with a variety of creative-coding environments, including Max/MSP, Quartz Composer, and Arduino.

References

Available upon request.