NICHOLAS ARNER

330-418-1965 // nicholasarner@gmail.com // nickarner.com   //   San Francisco, CA

Skills

Languages / Platforms: Swift, Objective-C (iOS/macOS/watchOS), Python, C++ (Arduino)
Frameworks: ARKit, CoreML, CreateML, CoreVision, CoreVideo, CoreAudio, CoreBluetooth, UIKit

Experience

FREELANCE DEVELOPER / PERSONAL PROJECTS; COLUMBUS, OHIO — SEPTEMBER 2019 - PRESENT

Working with startups and other clients on iOS development and other experience prototypes. I've also been working on personal projects, including a location-based audio chat app, as well as other iOS and hardware - related projects.

HUMAN-MACHINE INTERFACE ENGINEER, ASTEROID TECHNOLOGIES; SF BAY AREA — NOVEMBER 2017 - MAY 2019

While at Asteroid, I worked to develop a macOS app for building ARKit interactions that are ready to run on iOS devices. I also researched and prototyped AR-focused features and experiments around a variety of modalities, including audio and voice, haptics, gestures, and controllers.

FREELANCE IOS DEVELOPER; COLUMBUS, OHIO — AUGUST 2017 - NOVEMBER 2017

Worked with local and international startups with building new features and maintenance for their iOS apps.

ASSOCIATE CONSULTANT, WORKSTATE CONSULTING; COLUMBUS, OHIO — FEBRUARY 2016 - AUGUST 2017

SportsLine by CBS Interactive: Lead developer; worked closely with designers and external stakeholders
Also developed an iPad Pro-based kiosk app in Swift for a gov't planning agency

IOS/OS X DEVELOPER, SQUIRRELS LLC; NORTH CANTON, OHIO — JANUARY 2015 - JANUARY 2016

Reflector: The core product I worked on; a wireless mirroring and streaming receiver for iOS/Android.
Reflector Student: Co-developed in Swift from the ground up, from prototype to launch

RESEARCHER/DESIGNER, AIRMARKR; REMOTE — 2014

Researcher in gestural interfaces for an early mobile augmented reality startup making movement-based drawing applications.

Projects

SELECTED ALPHA DEVELOPER, GOOGLE PROJECT SOLI

I was one of 80 developers worldwide to be accepted into Google ATAP's Project Soli Alpha Developer Project, and was one of 14 developers to be invited to Google HQ to workshop Soli use cases. Work published in NIME 2017 Proceedings.

CORE CONTRIBUTOR, AUDIOKIT

I was a core contributor of AudioKit, an open-source audio analysis, synthesis, and processing toolkit for iOS and OS X apps. My contributions include operation defaults, presets, tests, and documentation.

Education

MSc Research in Music Technology, 2014 | University of York (York, UK)
Thesis: Investigating the use of multi-touch gestures in music interaction
Audio Technology Work-Study, 2012 | The Banff Center (Banff, Canada)
BA Music Technology, 2012 | Capital University (Columbus, Ohio)