

Twenty years shipping software, mobile for most of the iPhone's existence — usually solo or in a small team, and often walking into something on fire that needs immediate triage. **One of five engineers on the iOS team at Shazam**, sole developer of its listening animations, during a run to 250 million downloads. **CTO at Wingman**, onshoring an agency-built MVP and scaling it internationally. Repeated pattern of **training and leading engineering teams** through platform transitions and acquisitions.

EXPERIENCE

CTO & Product Lead · Wingman 2019–2025

Dating startup. An offshore agency had built a rough MVP and still controlled the app, backend, website and source. Onshored all of it, brought the product up to a standard worth scaling, hired and led the engineering team, and grew it internationally with reliability as the explicit priority.

Lead iOS Developer · River Health 2022–2024

Sole iOS developer on River Health, a telehealth product. Rebuilt the app to protect patient privacy in a regulated domain, and reworked the experience so it was navigable by patients under real conditions, not only by clinicians.

Lead iOS Developer · Learn With Homer 2015–2018

Engineering team were web and backend developers with a native iOS product to ship and no in-house Swift capability, very early in Swift's life. Trained the entire team from scratch and led them through the company's acquisition.

Developer · Cuddlr 2015–2016

Built in collaboration with artist Jeff Kulak. Over 250,000 participants, with worldwide press coverage.

The Guardian · New York Times · Salon · BBC · CBS · NBC · CBC · NPR · MTV

iOS Developer · Shazam 2012–2014

One of five engineers on the iOS team. Sole developer of the 'listening' animations — the app's most-seen and most load-bearing piece of interface. Featured by Apple in TV ads, the App Store, physical stores worldwide and at WWDC. 4.5-star average rating, 250M+ downloads. Later acquired by Apple.

Sole Developer · Jingle+ 2014

Physical-modelling shaker app with over half a million downloads.

Sole Developer · SingSmash 2010–2011

iPhone/iPad game controlled by live singing input. Featured by BBC Music Magazine, Classic FM and ITV; 4.5-star rating.

HOW I WORK

Own UK limited company (Charlie Robert Williams Ltd) since 2014, billing US and UK clients B2B in dollars, no employer of record needed. UK hours, meetings scheduled in the afternoon overlap; kickoff onsite, up to two weeks onsite per quarter. Two shapes of engagement: **fractional Head of Mobile** for a company without a senior mobile person, or **fixed-scope delivery** — a stalled release, an inherited codebase, an app rescued from an outside vendor.

TEACHING

Swift course, 2015

NewCircle, San Francisco · client Epocrates

Lecturer

Columbia College Chicago, MFA Music Composition for the Screen
2006–2010

Faculty

Northwestern University School of Music
2001–2003

Instructor

CodeFirst:Girls, Bath
2014–2015

Workshops

Creative coding, UK venues & Knowle West Media Centre
2019–2025

EDUCATION

MPhil, Distinction

Centre for Music and Science, University of Cambridge
2011–2012

BMus, Piano Performance

Northwestern University
2001

RECOGNITION

Creative Business Growth Fund

West England Combined Authority
2022

CreaTech 100, Ones to Watch

UK Creative Industries Council
2021

Rising Star Award

Cambridge University Festival of Ideas
2012

Jury Prize, New Music Performance

2nd Shostakovich Int'l Piano Competition, St Petersburg
2001

SPEAKING

How I See Music Using Code

TEDxBath
2019

Biomimetic Electronics

Univ. of Bristol · Pervasive Media Studio
2018

Never Give Up on Quitting

TEDxWageningenUniversity
2018

STACK

Swift SwiftUI UIKit
Objective-C Core Animation
App Store Delivery Team Leadership