

# MICHAEL EDGCUMBE

Berlin, DE & New York, NY  
+1 (865) 202-8679

[www.secretatomics.com](http://www.secretatomics.com)

[voxels@noisederived.com](mailto:voxels@noisederived.com)  
[www.linkedin.com/in/voxels](http://www.linkedin.com/in/voxels)

## PRINCIPLE CONSULTANT for UX Design and Platform Engineering in AR/VR/XR products

- 9 years focusing on designing and developing full stack iOS applications and backend services, C++ and Java statistical data explorers and visualizations, SceneKit and Unreal Engine interactive installations, and SpriteKit and UIKit games for adults and kids.
- 4 years experience as a UX Engineer at Google, leading the design and development of production-backed architectures supporting proofs of concept as well as a monolithic prototyping platform demonstrating 35 E2E user journeys; the platform guided design and project manager leads to set 1-3 year strategies for engineering teams building Google Maps.
- 20+ years helping launch products with venture-backed startups, non-profits, solo-entrepreneurs, and Fortune 20 companies like Google, Samsung, and Apple.
- Involved in researching and developing new application paradigms, solving challenging and interesting challenges in the AR/VR/XR space.

## PROFESSIONAL EXPERIENCE

**Secret Atomics**, Berlin, DE

**Principal Consultant for UX Design and Platform Engineering**

April 2023 - Present

Accomplished Lead UI/UX Developer and Engineer with over 9 years of experience in designing and developing UI and interactive experiences for shipped products. Excels at collaborating with creatives, artists, and engineers to create innovative and delightful user experiences.

- Experience in building immersive 3D applications, prototypes, and simulations using game engines like Unity, Unreal, SceneKit, SpriteKit, OpenFrameworks, Processing, etc., as well as in collecting multimodal sensor data or instrumenting prototypes for analysis.
- Experience in rapid prototyping and balancing time vs. complexity trade-offs has been valuable in contributing to creative tech projects in AR and XR. Ability to join projects at varying stages of production.
- Contributes to a wide range of internal frameworks and services, resulting in deeply integrated applications; adept at working effectively across team boundaries.
- Technical expertise working with technologies such as SwiftUI, RealityKit, UIKit, ARKit, Unreal Engine, and various application and systems programming languages. Skills beyond coding: source control, debugging, documentation, CI, and build systems.
- Self-directed problem-solver, tackling complex challenges, breaking them down into actionable items and iterating relentlessly until the best ideas shine through, and offering an attention to detail, curiosity, adaptability, and thoughtfulness to drive the creation of empowering creative solutions to complex problems.
- Possess a strong background in qualitative and quantitative user research techniques, combined with excellent communication skills, enabling collaborative teams to scope, carry out, and present research independently.

**Google**, New York, NY

**UX Engineer, then Senior UX Engineer**

September 2018 - March 2023

Led UXE for iOS development on Google Maps, providing design solutions and live, prod data driven prototypes reviewed by cross-functional collaborators, mission directors, and executive sponsors. UX Engineer (2018-2021) and Senior UX Engineer (2021 - 2023)

- Collaborated with UXD partners to architect, author, maintain, and internally distribute a monolithic prototype demonstrating ~35 separate end to end user journeys demonstrating PM and Eng OKRs 1 - 2 years ahead of launch.

- Offered 3 working alternatives for senior UX members to drive the final IA for 4 tabs and 3 future entry points
- Originated, pitched, and patented experience concepts that acquired executive sponsorship to set the design direction defining engineering OKRs for up to 12-person engineering teams for the implementation of features like Area Busyness, Place Sheet, Immersive View, Bard and other unannounced features.
- Blended custom implementations of internal tech such as Google Maps, StreetView, Live View, Immersive View, and Earth Engine with ARKit, AVFoundation, MLKit, Firebase into live-data proofs of existing and future OKRs across 4 mission teams, 1 to 3 years ahead of production engineering availability.
- Investigated mixed media experiences including combinations of cloud-hosted Unreal Engine, ARKit, SceneKit, UIKit and SpriteKit with large language model (LaMDA) and Google Assistant generated conversation

**Homer Learning**, Remote

March 2017 - June 2018

**Senior Engineer**

Contributed code and white papers to the iOS, analytics, backend, and content production pipeline teams

- Designed and implemented a dynamic, CMS-driven contextual onboarding system to support management’s complex user flow
- Designed and implemented a behavior tracking analytics and non-fatal error reporting system to cloud services to improve insight into user experience for executive stakeholders
- Refactored the main navigation controller to provide smooth transition blends for UIKit and Cocos2D
- Refactored audio asset handling into a AVFoundation-based sequenced, multi-track audio manager to improve handling of complex audio tracks
- Configured continuous integration for XCode bots and parallelized tests for Bitrise
- Developed new mini game templates and view controllers
- Built a state machine that improved device orientation management and handled deep links to any feature

**Noise Derived**, Remote

September 2015 - December 2016

**Lead Engineer**

- Provided app development services for design agencies and owners producing: Evil Apples, Robo3D, Girl Effect, MTV News, and the Liquor Cabinet.

**Samsung Research of America**, New York, NY

December 2014 - August 2015

**Senior Engineer**

- Designed and implemented a network client to fetch photos from first-party and third-party repositories, using NSURLSession Grand Central Dispatch, and Core Data
- Implemented a custom gallery layout algorithm using UIKit
- Implemented an end-to-end feed, gallery, tagging, and editing photo experience, using auto layout for executive stakeholder feedback and the beta launch

**EDUCATION**

**Bachelors of Science: Game Art and 3D Animation**, 2023 - 2025

SAE Institue Berlin, DE

**Master of Professional Science: Interactive Telecommunications Program**, 2009 - 2011

New York University, New York NY

**Bachelor of Science in Economics: Wharton School**, 1997 - 2004

University of Pennsylvania, Philadelphia, PA, Honors: Joseph Wharton Scholar, National Merit Scholarship

**LANGUAGES**

Authoring in: Swift (daily); C++, Javascript (weekly); Objective-C, Python (yearly); SwiftUI (beginner)

**OTHER**

[Patent US-20220083309-A1](#) (2022); [Patent US-11137976-B1](#) (2021)

Eagle Scout, 1997