

# Casey T. Morris



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## EXPERIENCE

- Philo** Charlotte, NC/Remote  
April 2024-Present  
*Kotlin Multiplatform (KMP) Software Engineer*
- Tech lead for a KMP library consumed by 10+ engineers across 9 client apps incl. Android, Apple, and JS targets
  - Owner of the client side business logic layer including shared networking, caching, state management via an MVI architecture, and analytics that underpin all client content engagement and discovery features
  - Architect and implementer of cross-functional features including Picture-in-Picture, in-player browse, player previews, autoplay browsing, and a guide train schedule, driving increased watched times and first pays.
  - Collaborated with client devs on native UI integration and decreased time to client app parity across by >50%
  - Identified ad beacon firing gaps and led redesign to improve beacon success rates resulting in 3% ad revenue lift
  - Drove GraphQL efficiency initiative within the shared KMP networking layer, implementing persisted queries and request batching to achieve an 86% payload size reduction and meaningful server compute savings
  - Founding member of the Philo AI Working Group, developing standards for agentic tool usage across engineering and driving measurable adoption through demos, office hours, and internal tooling evaluation
- BarTopTV (formerly Waev)** Charlotte, NC  
2023-Present  
*Head of Engineering (Consultant)*
- Responsible for all engineering of the HW and SW platforms, including custom HW running Android 8 with Jetpack Compose APK, NestJS backend with RDS on AWS, and ReactJS CMS dashboards
  - Led HW/SW scaling efforts from 5 to 100 venues in Charlotte, and initial expansion into Philadelphia (ongoing)
  - Implemented various ad-tech solutions, including custom PrebidJS wrapper, to open new revenue source (an increase of 10X per venue), lowering barrier to entry for adoption in market
- SONANCE** Charlotte, NC/Remote  
Jan 2023-April 2024  
*Senior Software Engineer - Electronics R&D*
- Led feature requirement development for next gen audio hardware alongside product, support, and engineering
  - Utilized AWS Resources (Lambda, API Gateway, RDS, DynamoDB, VPC, Amplify) to build a cloud-based end to end device OTA management solution and dashboards for device and amplifier configuration management
  - Created custom python applications and libraries for configuring audio pipelines on embedded Linux devices
  - Implemented custom SSH Certificate Authority and secure artifact signing functions in the cloud using AWS KMS
- ORRO** Charlotte, NC/Remote  
July 2018-Nov 2022  
*Senior Embedded Engineer*
- Created custom Java/Kotlin application for core architecture implementation on proprietary hardware
  - Defined and implemented core lighting controls, Orro REST and PubSub API, and OTA update processes
  - Maintained and supported Android and Yocto build system CI/CD, utilizing Jenkins, Docker, and GitHub Actions
  - Led new SW/FW feature development, working with design, product, engineering, QA and support
  - Using Yocto, built custom Linux OS, various drivers, U-boot customizations, SensorHAL layers, JNI libraries
  - Developed firmware for PIC16, Cortex M0/M4/M7, and Cypress PSoC processors for features incl.: multi-phase dimming, voltage, current, power sensing and calculation, and novel multiway toggle support
  - PM for Orro S new product launch, overseeing all efforts from EVT through launch, reporting to CEO
  - Ported audio recognition library tensorflowlite to ARM core with custom JNI wrapper for use in JVM app
  - Represented Orro at trade shows and industry events, networking with potential customers and partners
- RAYTHEON** Various, USA  
June 2016-June 2018  
*FW/SW Engineer, Rotational Engineering Leadership Development Program (RELDP)*

## EXTRACURRICULAR PROJECTS

### Published iOS Apps

- **TeeTimeCaddy** - Using Compose Multiplatform and Supabase backend, built a golf tee time alert management application to send native notifications when tee times open at Charlotte area golf courses
- **SparkLocal** - Using SwiftUI, built iOS app to control Orro switches on the local network. Relied on Bonjour to discover devices on the local network and websocket API to send command to control lights

### Active Web Applications

- **BeaconFound** - a lost and found for every item via custom QR tags. Supabase backend with a React registration and management app and an Astro CMS for sales with Shopify plugin
- **WagerLeagueBets** - the first fantasy sports betting league, allowing users to wager fake money each week on NFL games and track progress across a season against their friends. Supabase and React app. Built with Lovable

## EDUCATION

- UNIVERSITY OF WISCONSIN-MADISON** *Master of Science in Electrical Engineering* May 2016  
**UNIVERSITY OF NOTRE DAME** *Bachelor of Science in Electrical Engineering* May 2014