

# ROYCE MARS

## SOFTWARE ENGINEERING MANAGER

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- Experienced Software Engineering Manager, Professional Google Cloud Architect, AI & Android XR Futurist and Public Speaker with 18+ years in software development, 8+ years in technical leadership, and 2+ years in software engineering manager role.
- Proven track record delivering 20+ mobile-first, cloud-based solutions for Fortune 100 tech companies using Java, Kotlin, Jetpack Compose, Android SDK, Swift, Objective-C, iOS SDK, Google Cloud Platform, AWS, working in multiple complex, matrixed organizations, driving scalability, reliability, and performance.
- Eager to bring deep technical leadership and cross-cultural team management, fostering engineering excellence, helping to solve complex engineering challenges, and scale innovation across global platforms.

## EXPERIENCE

### SOFTWARE ENGINEERING MANAGER | EPAM Systems

January 2023 - June 2025

- Managed cross-functional distributed delivery team of 10+ engineers across North America and LATAM, building large scale telecom project for Fortune 100 client, built with Java, Kotlin, Jetpack Compose, Android SDK, JavaScript, Google Cloud Platform in telecom business domain.
- Delivered key milestone for large scale AI-powered wearable platform for Fortune 100 client built with Kotlin, Jetpack Compose, MVVM, Android SDK in wearables business domain.
- Launched flagship Wear OS product for Fortune 100 client with 2B+ daily users built using Java, Kotlin, Jetpack Compose, Android SDK and Google Cloud Platform.
- Architected and launched a global enterprise telecom platform based on Google Cloud Platform, Android SDK, Java, Kotlin for Fortune 100 client.
- Delivered 3 cross-platform mobile + cloud products built with Kotlin, Jetpack Compose, MVVM, Android SDK, Swift, Objective-C, iOS SDK, Java, Google Cloud Platform in wearables, multimedia, automotive and telecom business domains.
- Presented delivery innovations at the global automotive tech summit.
- Built and scaled dev excellence programs across teams and in the global tech community with 7K+ members.
- Managed and mentored 50+ engineers across global teams.
- Interviewed 20+ candidates to drive end-to-end staffing and maintain delivery continuity.

- Established agile delivery using enterprise workflow tools with KPIs, Scrum, and stable test environments.
- Created team-wide knowledge base, hosted tech deep dives, and mentored engineers to elevate expertise.
- Onboarded 4 new engineers worldwide and built a high-performing, collaborative distributed team for Fortune 100 cloud and mobile telecom project.
- Expanded platform support to Android T & U while maintaining release speed.
- Onboarded 3 new global auto partners into the release pipeline without slowing delivery.
- Automated release workflows, boosting release team productivity by 300%.
- Improved release quality of intelligent automotive AI voice assistant releases by 10%, cut failed releases by 30% via QA upgrades.
- Doubled release cadence for intelligent automotive AI voice assistant by overhauling schedules and streamlining delivery for a Fortune 100 automotive ubiquitous platform.

## **LEAD SOFTWARE ENGINEER | EPAM Systems**

**January 2018 - January 2023**

- Directed Wear OS and Android application development of a global multimedia product for Fortune 100 client, impacting billions of global daily users using Java, Kotlin, Android SDK, Google Cloud Platform).
- Streamlined the release of a global COVID-tracking software for Fortune 100 client, built with Java, Kotlin, Android SDK, Swift, Objective-C, iOS SDK, Google Cloud Platform, and pre-installed on most of the popular smartphones, enhancing health monitoring across multiple countries.
- Designed and developed full-stack web product for Fortune 100 client global data centers hardware management using JavaScript, TypeScript, Angular, Google Cloud Platform.
- Architected mobile-first solutions for healthcare & IoT clients leveraging Kotlin, Java, Android SDK, Swift, Objective-C, iOS SDK, Google Cloud Platform, AWS meeting industry-specific requirements.
- Led development and automation teams across healthcare and IoT projects, contributing to R&D initiatives and driving innovation in product delivery.
- Managed cross-functional teams to streamline delivery of healthcare and IoT products for Fortune 100 clients.
- Led pre-sales and discovery engagements, aligning solutions with client needs and helping secure multiple new business wins across finance and tech sectors.
- Directed cross-functional teams delivering eCommerce, Real Estate, and Media solutions using Android SDK, Kotlin, Java, iOS, Swift, AWS and Google Cloud Platform, ensuring scalable and resilient cloud architectures.
- Drove innovation by leading R&D initiatives using Flutter, React Native, JavaScript, TypeScript and Angular, resulting in rapid prototyping and competitive technical differentiation.
- Architected and presented cloud-based solutions with Google Cloud Platform and AWS during pre-sales to Fortune 100 clients, increasing engagement and accelerating deal closure.

- Managed delivery of cloud-native products across industries, built using Kotlin, Java, Android SDK, Swift, Objective-C, iOS SDK, Google Cloud Platform and AWS to meet performance and availability requirements.
- Led end-to-end delivery of mobile, backend, and frontend solutions built with Java, Kotlin, Android SDK, Swift, Objective-C, iOS SDK, JavaScript, TypeScript, Google Cloud Platform, AWS for Real Estate and EdTech platforms, ensuring cross-team alignment and timely project execution.
- Architected mobile-first systems during pre-sales and project kickoffs, tailoring scalable solutions that secured client buy-in and accelerated project initiation using Java, Kotlin, Android, Swift, Objective-C, iOS SDK, JavaScript, TypeScript, Google Cloud Platform and AWS.
- Mentored junior engineers and interview candidates, actively shaping team capabilities and contributing to a culture of continuous learning and excellence.
- Presented solution proposals and technical insights at internal and external events, boosting visibility of team expertise, technology excellence and strengthening client trust.
- Built strong engineering culture by leading cross-discipline teams and promoting shared best practices across full-stack and mobile projects.

#### **GDG LEADER AND SPEAKER | Google Developer Groups**

**May 2015 - May 2019**

- Grew and managed a Google Developers community of 600+ members by fostering active collaboration, mentoring local leaders, and driving consistent engagement.
- Organized 20+ developer events, hackathons, and training sessions, mentoring speakers and leading hands-on engineering workshops to elevate technical knowledge sharing.
- Forged international partnerships with speakers and organizers, increasing visibility and global collaboration across GDG Kyiv-Center, GDG Dnipro, and GDG Kharkiv communities.
- Contributed to Google Developers Ukraine GitHub initiatives, and represented GDG Ukraine at global events like Google I/O, GDG DevFest Minneapolis, and DroidCon San Francisco.
- Spoke at high-profile conferences including GDG DevFest Ukraine, and GDG Central and Eastern Europe Summit, sharing technical insights and inspiring hundreds of developers across multiple cities.

#### **LEAD SOFTWARE ENGINEER | DataArt**

**January 2017 - January 2018**

- Led Android and iOS teams as Technical Architect during pre-sales and delivery phases, driving solution design and ensuring technical alignment with client goals.
- Directed end-to-end project execution, managing scope, timelines, and team coordination—resulting in successful launches and repeat business.
- Secured project upsales through hands-on supervision and deep technical involvement, contributing to account growth and increased customer satisfaction.
- Bridged pre-sales and delivery by translating business needs into scalable mobile architectures, enhancing delivery predictability and client trust.

**SENIOR SOFTWARE ENGINEER | DataArt****October 2015 - January 2017**

- Engineered robust Android and iOS applications using Java, Android SDK, Swift, iOS SDK, RxJava, TDD, MVP and MVVM architectures - delivering maintainable, scalable solutions across phone, tablet, and wearable platforms.
- Developed advanced Android apps using Java, Android SDK, RxJava, Realm, Android Studio; applied Google Material Design principles and ensured test coverage with JUnit, Robolectric, and UI automation.
- Built AndroidWear 2.0 apps with integrated sensor and Google Fit APIs - enhancing wearable UX with ambient mode and fitness tracking capabilities.
- Delivered feature-rich iOS apps in Swift, Objective-C, iOS SDK for iPhone, iPad, and Apple Watch, using CocoaPods for dependency management and XCTest for TDD.
- Applied Functional Reactive Programming principles with RxJava and Java 8 Streams API; implemented dependency injection with Dagger 2 and ButterKnife, optimizing codebase modularity.
- Managed full CI/CD lifecycle using Jenkins, Fabric, and Firebase - automating mobile test, build, and release pipelines to accelerate delivery and reduce errors.

**SOFTWARE ENGINEER | DataArt****August 2014 - October 2015**

- Delivered high-performance Android apps built with Java, Android SDK, MVP architecture, Firebase, Realm, and other ORMs - ensuring scalability and maintainability through rigorous TDD with JUnit, Robolectric, and instrumentation tests.
- Enhanced user experience on wearable devices by developing AndroidWear 2.0 apps with integrated sensors, GoogleFit APIs, and ambient mode - pushing the frontier of connected health and fitness UX.
- Applied Functional Reactive Programming principles using Java 8 Streams API and RxJava - boosting responsiveness and modularity in real-time mobile apps.
- Streamlined development with Gradle-managed dependencies, Dagger 2.0 and ButterKnife for dependency injection, and Lombok for code generation - driving efficient and clean codebases.
- Contributed to backend integration through familiarity with Scala-based services - bridging mobile and server-side architecture for seamless data flows.

**SOFTWARE ENGINEER | Caiguda****February 2014 - August 2014**

- Built and deployed a niche social network Android application using Java, Android SDK, Fragments, and DrawerLayout - creating a responsive, user-friendly UI with seamless navigation and multithreaded data handling.
- Integrated backend APIs via Postman and custom networking layers - ensuring stable, performant communication between client and server under real-world load.
- Enabled real-time features by incorporating Google Play Services and Google Cloud Messaging (GCM) - delivering push notifications and extending Google ecosystem capabilities.

- Managed full release lifecycle via Google Play Console - handled app signing, build optimization, and staged rollouts for secure, production-grade deployment.

**SOFTWARE ENGINEER | Freelancer.com**

**February 2014 - April 2014**

- Developed a cross-platform game using Java in Android and Swing/AWT environments - leveraged Eclipse for structured project management and rapid iteration.
- Engineered rich multimedia experiences by integrating OpenGL ES for real-time 2D/3D graphics and MIDI for dynamic audio - delivering immersive gameplay and responsive visual feedback.

**SOFTWARE ENGINEER | ApriorIT**

**February 2013 - February 2014**

- Led development of a large-scale cross-platform remote access solution supporting Mac OS, iOS, Android, Linux, and Windows - delivered consistent functionality and UX across diverse platforms.
- Engineered Mac OS components using Objective-C, Cocoa, C/C++, and BSD/POSIX APIs - integrated OpenGL for rendering and FreeRDP for remote desktop protocols, ensuring high performance and reliability.

**SOFTWARE ENGINEER | DiscSoft Ltd**

**October 2011 - February 2013**

- Built and launched a Cocos2D-based iOS game for iPhone and iPad with Objective-C and C++ - developed a universal app architecture, implemented in-app purchases, and designed achievement/bonus logic, successfully releasing the product to the App Store.
- Pitched the game at the developer event, collaborating with the CEO to secure a successful publishing deal - played a key role in early-stage business development and product promotion.
- Led R&D initiatives using Cocos2D-X and Unity3D - expanded target platforms to Android, iOS, and Linux while exploring 3D animation workflows, directly influencing the company's future dev stack.
- Ported core disk emulation libraries from Windows (C/C++, Win32 API) to Mac OS (Objective-C, Cocoa), developing a fully functional Cocoa-based GUI and maintaining backend compatibility.
- Engineered disk emulation software on Windows using Win32 API, .NET, MFC, STL, and WPF - delivered robust system-level functionality and ensured seamless hardware abstraction.

**SOFTWARE ENGINEER | Dimalex**

**May 2011 - October 2011**

- Engineered high-performance cross-platform software targeting Mac OS, Linux, and Windows - utilized C, C++, Win32 API, and POSIX APIs to ensure low-level system compatibility and consistent functionality across all platforms.
- Led the porting of core libraries from Windows-specific Win32 API to POSIX-compliant interfaces - achieved full functionality replication on Linux and macOS, enabling broader deployment and platform independence.

- Optimized performance and maintainability by refactoring low-level system interactions, standardizing code structure across platforms, and leveraging STL and platform-specific best practices.

#### **SOFTWARE ENGINEER | AquaSoft Ltd**

**August 2010 - May 2011**

- Developed full-featured cross-platform CAD software for engineering design workflows across Windows, macOS, and Linux - delivered consistent UI/UX and functional parity by leveraging platform-specific capabilities within a unified codebase.
- Integrated Qt for GUI development on macOS and Linux, while building .NET API plugin extension wrappers for Windows - used C++, Qt, MFC, and C#/.NET across Microsoft Visual Studio and Qt Creator to bridge native and managed environments.
- Led R&D efforts involving C#, .NET, and managed C++ to prototype advanced CAD capabilities - utilized Teigha libraries for cross-platform drawing manipulation and optimized computational performance using OpenMP and ConcurrentRT.

#### **LEAD SOFTWARE ENGINEER | JSC DTP**

**March 2007 - August 2010**

- Led system integration of a distributed accounting solution into an enterprise-grade architecture - collaborated with cross-functional stakeholders across departments to gather requirements, modify core product features, and align technical deliverables with evolving business processes.
- Delivered custom enterprise software solutions for finance, manufacturing, and operations teams - built automation pipelines and data processing modules using C++, Delphi, Oracle PL/SQL, and VBA to enhance reporting accuracy and operational efficiency in multiple business domains.
- Streamlined internal workflows by developing custom Excel and Access tools via MS Office API - automated table aggregation and batch reporting routines, significantly reducing manual processing time for enterprise accounting teams.

## EDUCATION & CERTIFICATIONS

**MS, COMPUTER SCIENCE | National Metallurgical Academy of Ukraine**      **September 2006 - July 2010**

- AI-Driven Cross-Platform Rescue Robotics System (Graduation Project)
- Led the design and development of a sophisticated, AI-powered rescue robotics solution featuring a full-scale training and simulation environment. Engineered for cross-platform deployment on Mac OS, Linux, and Windows using C++, Qt, and OpenGL, the system demonstrated advanced capabilities in distributed systems design, real-time data visualization, and AI integration. The project exemplified an early commitment to building resilient, scalable, and mission-critical software across heterogeneous environments - skills directly transferable to cloud-native enterprise platforms.

**GOOGLE CLOUD PROFESSIONAL CLOUD ARCHITECT | Google**

**2018**

- Google Cloud Professional Cloud Architect Certificate by Google Cloud

## SKILLS

Software Engineering Management • Google Cloud Platform (GCP) • Cloud Architecture • Technical Leadership • Strategic Planning • People Management • Agile & Scrum • Roadmap Development • Cross-Functional Collaboration • Stakeholder Communication • Product Strategy • Distributed Systems • Scalable System Design • Enterprise SaaS/PaaS • CI/CD • Infrastructure Engineering • Security & Networking • Global Team Leadership • Technical Hiring • Coaching & Mentorship • AWS • Kubernetes • Docker • Git • Jenkins • RESTful APIs • Python • Java • Kotlin • C++ • C • JavaScript • Swift • Objective-C • .NET • SQL • PL/SQL • Oracle • Android SDK • iOS SDK • Flutter • Qt • Win32 API • POSIX • Unity3D • Cocos2D-X • OpenGL • Visual Studio • Xcode • Android Studio • Qt Creator • Eclipse • GitHub • JIRA • Confluence • Unix/Linux • macOS • Windows • RxJava • MVP Architecture • MVVM Architecture • Dagger 2 • Retrofit • RetroLambda • Lombok • Material Design • DbFlow • JUnit • Robolectric • Mockito • PowerMock • Google Maps API • MS Visio • MS Project • Firebase • SQLite • Content Providers • Android Wear • WatchKit • Core Data • AFNetworking • NSCache • NSUserDefaults • Figo.API • Google Play Alpha Testing • Bluetooth Low Energy (BLE) • GATT • Java Concurrency • Executor Services • GitLab • Trello • SQLiteOpenHelper • Speech API • MessagesApi • WearableListenerService • GreenDao • ButterKnife • ViewPager • FloatingActionButton • Android TV • Pebble/Fitbit • RxAndroid • Realm.io • Android NDK • Raspberry Pi • Android Data Storage • TypeScript Migration • Postman • Gitflow • Bitbucket • Jenkins CI • Network Analysis • WiFi Networking • Robolectric • XMind • Realm.io • Android TV • Firebase Cloud Messaging • AWS S3 • AWS Elastic Beanstalk • AWS Lambda



## PROJECTS

- **Worldwide Bestselling AI-Powered Wearable Platform (Engineering Manager, Android):** Delivered key milestone for a large scale AI-powered wearable platform with 2M+ of active users for Fortune 100 client built with Kotlin, Jetpack Compose, MVVM, Android SDK in wearables business domain [Kotlin, Jetpack Compose, Java, GraphQL, ReactJS, Swift, iOS SDK, Internal stack of Fortune 100 client CI/CD tools]
- **Marketing Analytics & Android Platform Business Integrations for Telecom (Delivery Manager):** Onboarded and managed a team to scale Fortune 100 client's marketing analytics and business integrations in Android platform, tailoring Android system functionality for new telecom business partners integrations, and ensuring 24x5 global support and effective knowledge sharing [Google Cloud Platform, Android SDK, Java, Kotlin, Internal stack of Fortune 100 client tools for build and project management]
- **Worldwide Bestselling Intelligent Automotive AI Voice Assistant (Project Coordinator):** Increased release speed by 100% and improved quality by 10%, while onboarding 3 new auto-manufacturing partners and introducing support for Android T and U [Google Cloud Platform, Android SDK, Java, Android Auto, Android Assistant, Internal stack of Fortune 100 client tools for release and project management]
- **Marketing Analytics & Android Platform Business Integrations for Telecom (Solution Architect):** Drove discovery phase, architecture review, and team alignment with Google for marketing analytics and new business integrations, providing technical product support for global build management system [Google Cloud Platform, Cloud Architecture, Android SDK, Java, Discovery, Knowledge Base Management, Presale Activities, Internal stack of Fortune 100 client tools for build and project management]
- **Worldwide Multimedia Bestseller for Wear OS (Android Wear OS Developer):** Streamlined and improved core features for Fortune 100 client's multimedia bestseller app on Wear OS for 2B+ global users, including Wi-Fi networking, offline mode, and RSB support on Samsung watches [Java, Kotlin, Android SDK, Wear OS, Cronet, Robolectric, JUnit, Internal stack of Fortune 100 client tools for build and project management]
- **Global Scale Datacenter Infrastructure Management (Full-stack Developer):** Led re-architecture of Fortune 100 world leader in cloud services' datacenter infrastructure tool, improving reliability and UX while migrating legacy systems [Java, TypeScript, Angular, Python, SQL, Protobuf, Internal stack of Fortune 100 client tools for build and project management]
- **COVID-19 Tracking Healthcare System (Development Team Lead):** Led discovery and development of system integrations and automated testing systems for COVID-19 tracking healthcare service as the part of two worldwide leading mobile platforms, ensuring cross-platform testing for Android and iOS [Kotlin, Java, Android, Swift, Objective-C, iOS SDK, XCTest, UIAutomator, Robolectric, CI/CD, Internal stack of Fortune 100 client tools for build and project management]



- **Worldwide Bestselling Trading Platform (Android Developer):** Implemented performance tuning, maintainability, and optimizations of sorting and caching core logic for Trading Platform Android app, optimizing performance using Realm, Retrofit, and RxJava [Kotlin, Java, Android SDK, RxJava, Realm, Retrofit]
- **Style and Grooming eCommerce Mobile App (Development Team Lead):** Led the offshore team in enhancing iOS and Android apps, refactoring code, and adding custom analytics for eCommerce subscriptions [Kotlin, Java, Android SDK, Swift, SwiftUI, iOS SDK, RxJava, AWS, Realm, Firebase]
- **Worldwide Leader in Real Estate Solutions Mobile Apps (Development Team Lead):** Led architecture reconstruction, growing the development team from 2 to 6, re-architected Android project, redesigned app UI, and transferred backend project ownership to active development team [Kotlin, Java, Android SDK, Swift, Objective-C, iOS SDK, RxJava 2, Retrofit 2, MVP, Dagger 2, Realm.io]
- **Healthcare Cross-Platform System for Medical Rehabilitation (Technical Architect):** Architected BLE / GATT Android app stack, ensured HIPAA compliance, and led development for both Android and iOS teams [Java, Android SDK, RxJava, Kotlin, Dagger 2, Moxy/MVP, Retrofit 2, Azure, Visual Studio Team Services]
- **Automotive GPS Navigator App for UK Leader In Retail And Delivery (Technical Architect):** Led the Android team for an automotive GPS navigator project, implementing features like Google Maps integration and delivery process improvements [Java, Android SDK, RxJava, MVP, Retrofit 2, Material Design]
- **Smart Home IoT App for Intelligent Power Management (Development Team Lead):** Led the Android team for a smart home IoT app, estimating power workloads and managing customer communications [Java, Android SDK, RxJava, Retrofit, Google Maps, IoT]
- **Android Wear Application for Healthcare Conference (Technical Architect, Android Wear Developer):** Developed and pitched an Android Wear application for a healthcare conference [Java, Android SDK, Wearable API, Git]
- **Risk Assessment Tool (Android Developer):** Contributed to the migration and major refactoring of an enterprise risk assessment tool using Android SDK and SQLite [Java, Android SDK, Retrofit, SQLite]
- **Mobile Personal Assistant for Medical Rehabilitation (iOS Developer):** Worked on an iOS personal assistant for medical rehabilitation, improving project architecture [Objective-C, iOS SDK, MVVM/VIPER, Realm, Cocoa Pods, Xcode]
- **R&D Betting App (Technical Architect, iOS Developer):** Architected and led the development of an MVP for a betting app in preparation for presentation at European financial conferences [Swift, iOS SDK, WatchKit, Core Data, AFNetworking, Xcode]
- **Android Client for IoT Cloud Platform (Android Developer):** Designed and developed an Android client for an IoT cloud platform gateway [Java, Android SDK, BLE, GATT, Android Studio]

- **Android Wear 2.0 Client for IoT Cloud Platform (Technical Architect, Android Wear Developer):** Designed architecture for an Android Wear 2.0 app, leading development and major refactoring [Java, Android SDK, RxJava, Retrofit, Lombok, Android Wear]
- **Mobile App for Learning Portal (Technical Architect):** Led the technical design and pre-sales for a learning portal mobile app supporting hybrid offline mode and push notifications [Java, Android SDK, JavaScript, REST API, RxJava, Kotlin, Firebase, JUnit]
- **Bluetooth Low Energy Gateway for IoT Cloud Platform (Android Developer):** Designed and developed an Android client (gateway) that connects multiple devices through Bluetooth Low Energy and exposes GATT services to an IoT cloud platform [Java, Android SDK, BLE, GATT, Android K-N APIs, Java concurrency, Android Studio]
- **Android Wear R&D Tiredness Symptom Checker (Android Wear Developer):** Developed an Android Wear application for a healthcare conference demo, introducing speech recognition and custom views to test attention levels [Java, Android SDK, Git, Wearable app, Speech API, MessagesApi, DataApi]
- **Enterprise Risk Assessment Tool (Android Developer):** Developed a risk assessment system that involved Android SDK and SQLite for gathering documentation and passing surveys [Java, Android SDK, Content Providers, SQLiteOpenHelper, Retrofit, Google Play Alpha Testing]
- **Social Networking Android App (Android Developer):** Built and deployed a niche social network Android application with seamless UI, backend integration, push notifications, and managed full lifecycle through Google Play Console [Java, Android SDK, Fragments, DrawerLayout, Postman, Google Play Services, GCM]
- **Cross-Platform Game (Java Developer):** Developed a cross-platform game with multimedia features using OpenGL ES and MIDI for immersive audio/visuals [Java, Android SDK, AWT, Swing, Eclipse, OpenGL ES, MIDI]
- **Cross-Platform Remote Access Solution (Mac OS Developer):** Led development of a cross-platform remote access system with robust UX and performance across 5 platforms including Android, iOS Mac OS, Linux and Windows [Java, Objective-C, C/C++, Cocoa, BSD/POSIX, Win32 API, OpenGL, FreeRDP]
- **iOS Game Development & Publishing (iOS Developer, Business Development, Sales):** Built and launched a universal Cocos2D iOS game with in-app purchases and achievements, pitched at developer events to secure publishing [Objective-C, C++, iOS SDK, Cocos2D]
- **Cross-Platform Game R&D with Cocos2D-X and Unity3D (Technical Architect, C++ Developer):** Led R&D to expand games across Android, iOS, and Linux, exploring 3D workflows and influencing tech stack [C++, JavaScript, Objective-C, Cocos2D-X, Unity3D]
- **Mac OS Disk Emulation Tool Porting (Mac OS Developer):** Ported disk emulation libraries from Windows to Mac, building a full Cocoa GUI with backend compatibility [C/C++, Objective-C, Cocoa, Win32]

- **Disk Emulation Tool on Windows (C++ Developer):** Developed low-level disk emulation software for Windows with Win32 API and WPF for hardware abstraction [C++, Win32 API, .NET, MFC, STL, WPF]
- **Game Pitch & Publishing Deal (Business Development, Sales):** Collaborated with CEO to pitch a mobile game at an industry event, securing a publishing deal [Business Development, Game Publishing]
- **Cross-Platform System Software Engineering (C++ Developer):** Engineered system-level tools for Mac OS, Linux, and Windows using cross-platform C/C++ APIs [C, C++, Win32 API, POSIX]
- **Windows to POSIX Core Libraries Porting (C++ Developer):** Led migration of system libraries from Win32 to POSIX-compliant APIs for platform independence [Win32 API, POSIX, C/C++]
- **Low-Level Performance Optimization (C++ Developer):** Refactored system-level code across platforms to improve maintainability and performance [STL, C++, Win32, POSIX]
- **Cross-Platform CAD Software Development (C++ Developer):** Built engineering-grade CAD software across Mac OS, Linux and Windows with consistent UI and native enhancements [C++, Qt, MFC, C#]
- **GUI and Extension Integrations for CAD (C++ Developer):** Integrated Qt UI and built .NET plugin support to bridge native/managed environments [C++, Qt, MFC, C#/ .NET, Visual Studio, Qt Creator]
- **Advanced CAD R&D and Prototyping (C++ Developer):** Prototyped CAD enhancements using Teigha and optimized rendering performance with OpenMP and ConcurrentRT [C#, .NET, C++, OpenMP, Teigha]
- **Enterprise Accounting System Integration (C++ Developer):** Integrated distributed accounting systems into enterprise architecture, tailoring core features to fit workflows [C++, Oracle PL/SQL, Delphi]
- **Custom Enterprise Automation Solutions (C++ Developer):** Built automation pipelines and financial software modules to improve data workflows [C++, Delphi, Oracle PL/SQL, VBA]
- **Office Tools for Workflow Automation (VBA Developer):** Developed Excel and Access tools to automate batch reporting and reduce manual effort [VBA, MS Access, Excel API].