# WILLIAM KINGSLEY

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## TECHNICAL SKILLS

**Languages:** Kotlin, Swift, Python, C#, Java, SQL, C++, JavaScript

**Technologies/Jetpack:** Compose, Paging3, Navigation, Retrofit, Hilt, Dagger, Room, Sqlite, OkHttp, Security, WorkManager, CameraX, Caffeine, Coroutines, MVVM, Material Design, Clean, Gson, Moshi, Hypergate, ZXing, Firebase, Multi-Module, Coil, MQTT, OAuth2, Bluetooth, BLE, Gradle, Mockk, JUnit, Espresso, KMM, SQLDelight, Ktor, Wear OS, SwiftUI

**Tools:** Android Studio, JetBrains, Xcode, Visual Studio, Azure DevOps, Jira, Git, Teams, Slack, Charles, Heroku, BitBucket, OneSignal, BugSnag, Postman, GitLab, Figma, VirtualBox, LucidChart, Microsoft Office

## PROJECTS

**Fidelity Bloom**: Fidelity Bloom is a youth investing app made to help improve the savings and spending habits of the next generation of investors. Fidelity Bloom teaches new investors through interactive challenges, in-app investment tips, and a variety of account benefits to demonstrate the importance of healthy financial habits.

- Developed Home, Save, Spend, and QA Challenges features to provide user financial support
- Implemented Multi-Module Clean architecture for creating reusable and maintainable modules
- Developed custom Jetpack Compose bar charts measuring and reporting investment performance
- Lead InRhythm development team and supported junior developer growth and learning
- Developed Unit tests using Mockk and JUnit frameworks for ensuring code correctness

**Digital Badge**: Digital Badge is a lone-worker mobile safety app built to help protect and monitor lone-workers in dangerous working environments. Digital Badge leverages the Google Maps API for location access management and features a check-in/check-out status monitoring system to ensure workers adhere to building safety guidelines.

- Developed status monitoring state-machine system for ensuring proper status and safety of workers
- Implemented Google Maps API for location and building geo-fence management
- MVVM architecture and components for promoting app maintainability
- Integrated OneSignal SDK for push notification status alerts of workers in dangerous environments
- Digitized employee credentials for easy-of-access of buildings and structures

**Pilot System**: Pilot System removes the complications of maintaining pen-and-paper flight manifests and accelerates passenger onboarding processes for NG aircraft. Pilot System tracks passenger status, provides digital flight manifest management features, and greatly reduces the likelihood of reporting errors on flight manifests for aircraft.

- Implemented OkHttp HTTP clients for easy consumption of .NET Core REST API
- Designed and implemented application UI and passenger rule sets for efficient onboarding
- Developed QR code analyzer using Jetpack CameraX library for passenger ticket scanning
- Jetpack Compose UI used to improve state management and development time
- Developed real-time passenger onboarding and new-arrival in-app management system

**Flight Reservation Request System**: Flight Reservation Request System (FRRS) expedites passenger aircraft reservation requests for NG employees. FRRS provides employees the capability to quickly reserve seats on passenger aircraft and allows for updating of flight reservation info in a single friendly mobile interface.

- Lead team development efforts and release timelines for deployment with management
- Used View and Jetpack Compose UI compatibility to better separate logic and improve maintainability
- Integrated the ZXing library for generating ticket QR codes to improve passenger flight onboarding
- Leveraged Hypergate access control to enable single sign-on to improve user experience
- Communicated with multiple teams to align and satisfy app requirements and user expectations

**PeopleFinder:** Developer of the PeopleFinder Android native mobile app for Northrop Grumman. PeopleFinder provides fast enterprise-wide search and discovery of employee information. By improving search times PeopleFinder reduces the amount of time employees spend gathering employee information for operation and shipment tasks.

- Interfaced with Active Directory API using Retrofit and Hypergate to retrieve employee info
- Designed and developed app UI using View toolkit and developed custom search field
- Room persistence library integrated for preserving user favorites and recent searches
- Developed LRU image cache for search results allowing for lazy loading of profile images
- BugSnag used for error reporting and app health monitoring in production

**Possible@Work:** Possible@Work is an Android native mobile app for accessing the latest Northrop Grumman company news. Possible@Work uses the OAuth2 access control schema and features news content caching, refreshing, and single sign-on to improve overall user experience.

- Developed OAuth2 access control using EncryptedSharedPreferences for token storage
- Designed and developed app UI and collapsing toolbar for convenient user navigation
- Used the Caffeine library for news content caching reducing network loads
- Hilt library implemented for dependency injection management to improve testability
- HTML parser used to render news content for Android views allowing for markdown rendering

**Timesheet:** Associate developer of the Timesheet mobile app for Northrop Grumman. Timesheet is one of Northrop Grumman's first downloadable mobile apps to be used on employee personal devices. Timesheet streamlines the process of timekeeping and time management while also providing users with critical company alerts and info.

- Assisted with integrating generated API client code using Swagger Editor
- Implemented MVVM ViewModel, Repository, and Data Source components
- Supported development of .NET Core REST APIs for data transfer and use by Timesheet
- Provided support for junior developers and helped organize development efforts
- Developed algorithms for content sorting and list view displays for convenient user time entry

**NG Notes:** Developer of the NG Notes iOS mobile app for Enterprise Service's first internal hackathon. NG Notes is a note taking application developed to be used by Northrop Grumman employees as a task management aid. The application features a basic authentication process and allows for users to categorize notes by project for better management of material.

- Developed .NET Core API for management of user projects, notes, and in-app authentication
- Used Figma to design app UI components and architected basic user flow experience
- Developed Azure API app services and Azure SQL DB for hosting .NET Core API and data store
- Constructed asynchronous and synchronous HTTP clients for interfacing with .NET Core API
- SwiftUI, MVVM, and URLSession best-practices used for networking and view development

**Aktiv Mobile App:** Founder and developer of the Aktiv Connection social exercise mobile app. Aktiv offers a revolutionary new way of connecting like-minded people dedicated to exercise and fitness in a social and fun way. The Aktiv app makes it easy to make new acquaintances while also engaging with others to help you reach your fitness goals.

- Integrated Room for storing user preferences and calendar events to support offline-first interaction
- Caffeine used to cache media content and Moshi for JSON decoding of API responses
- Developed messaging, calendar, search, and media content management features
- Paging3 library used for pagination for video content for continuous user engagement
- Developed business plans and app development timeline for release

**Virtual Industry Day**: Assisted in founding and strategic development of the Virtual Industry Day platform for connecting government tech needs and solutions. Virtual Industry Day was developed to make it easy for government agencies like the Department of Defense to find and vet potential technology solutions.

- Formulated the desired functionality and vision of the platform from project inception
- Developed and maintained Node.js microservices and CI pipelines improving developing times
- Lead in relational database design, implementation, and continued management
- Developed JavaScript applications for responsive and user-friendly web pages
- Lead testing of project using the Cypress framework to improve UI quality control

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# WORK EXPERIENCE

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| **care.ai**<br>Great Falls, MT | Senior Mobile Developer | Jan. 2023 – present |
| **InRhythm**<br>Great Falls, MT | Senior Android Engineer | Mar. 2022 – Dec. 2022 |
| **Northrop Grumman Corporation**<br>Helena, MT | Software Engineer | Jun. 2020 – Mar. 2022 |
| **Aktiv Connection**<br>Bozeman, MT | Software Engineer | Mar. 2020 – Apr. 2021 |
| **MilTech**<br>Bozeman, MT | Full Stack Developer | Feb. 2018 – May 2020 |

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# EDUCATION

**Master of Science in Computer Science, Computing Systems**
Georgia Institute of Technology, Atlanta, GA
Expected graduation date: May 2024

**Bachelor of Science in Computer Science, Professional Option**
Montana State University, Bozeman, MT

**Associate of Science, General Option**
Great Falls College Montana State University, Great Falls, MT

For more information about my work visit my website at: https://williamkingsley.com