MATTHEW DUFFIN

Software Engineer

Location
London, UK

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GitHub
github.com/duffin22

SKILLS

Android SDK
Java & XML
JUnit4
Espresso testing
Android performance analysis
Android IME APIs
Android accessibility guidelines
Google APIs
Git
Material design
SQLite databases
Firebase
HockeyApp
JSON
OKHttp & Retrofit
Butterknife

PROFILE

I am a creative and versatile Android developer with a Master's degree in mathematics. I am originally from England, having also spent time living and travelling in various places around the world in recent years.

I thrive in challenging and high-pressure environments, and I utilise my infectious positivity to collaborate effectively with others. In my free time you can find me exploring, hiking and creating new cocktails.

EDUCATION

Master of Mathematics
University of St Andrews
Fife, UK
Completed June 2014

EXPERIENCE

Software Engineer
Microsoft UK. London, UK (3rd January 2017 - present)
Working on SwiftKey smart keyboard for Android. Projects and features worked on include:
- Chinese handwriting input for SwiftKey - worked with one other developer in creating handwriting input in SwiftKey for the first time. This feature was crucial in securing high profile partner contracts for SwiftKey.
- Typing performance improvements leading to greater overall stability as measured by numerous metrics including: key press delay and application not responding rate.
- Game mode keyboard - sole developer responsible for delivering a semi-transparent, floating keyboard that can be used with fullscreen game applications.
- Ongoing bug triage and fixing for partners - covering areas including: text input, UI design, user customisation, accessibility features, keyboard performance.

Master of Mathematics Degree
University of St Andrews. Fife, UK (September 2010 - June 2014)
Master's degree completed in pure mathematics at a top-three ranked university. Final dissertation focused on combinatorics and Latin squares. Other focus areas included: group theory, graph theory, linear algebra, mathematical programming and discrete mathematics.

PROJECTS

My Cocktails
https://play.google.com/store/apps/details?id=com.hfad.cocktaillayouts
A cocktail recipe app aimed at bartenders and people who like to experiment with cocktails at home. Built with tools including: SQLite databases, asynchronous tasks, custom RecyclerViews and adapters, asynchronous networking libraries, shared transition animations, Fabric analytics. Since its release the app has 10,000+ downloads, 100+ active users per day, and a store rating of 4.4 stars.

Hector by Autel
https://github.com/duffin22/autel
Worked with a small team in building a flight planning Android application for drones. My responsibilities included: Google Maps API integration, creating a mutable shape for users to plot a survey area, developing a complex flight path algorithm, communicating the path to the drone.

Builders Lighting Application
https://github.com/duffin22/builders-lighting
Created a large-scale ordering application for lighting contractors. My responsibilities included: developing design and user flow using UX research techniques, native Android camera and gallery interaction, SQLite database setup, linking UI to actions.

FindMyPet!
https://github.com/duffin22/lost_pets
Worked as part of a small team in creating the winning entry at a Socrata-sponsored hackathon. An application aimed at helping to reunite owners with lost and found pets. My responsibilities included: liaising between design and development teams, developing user flows, structuring API calls and models using retrofit, caching data locally using SQLite databases, creating custom dialogs, implementing UI features.