

## GEORGES KANAAN

<https://ge0rges.com/> | ge0rges@ge0rges.com | <https://github.com/Ge0rges>

### Education

**Bachelor of Computer Science** at the University of Toronto

See next page for relevant coursework.

September 2017 – July 2021

**French Bac.** at International College, Beirut

*Mention Bien* distinction on the French Baccalaureate with a notable 17/20 in math. *Série Scientifique* Class of 2017.

### Academic Research

**Research Assistant** at the American University of Beirut

May-August 2018

- Rewrote and worked on adapting an existing OCT scanning algorithm to different scanner formats.
- Used machine learning to identify valid corneal scan frames from the original video format.
- Used OpenCV to detect corneal haze contours and the corneal demarcation line.
- The resulting comparative study will be submitted for review and upon approval I will be listed as a contributor.

### Work Experience

**Anghami**, iOS Developer

June-August 2017

- Independently integrated my own music syncing protocol from Airly into the mobile streaming service app.
- Contributed to ongoing development of the mobile app in collaboration with the iOS engineering team.

**PriceWaterhouseCoopers**, Cyber Security Intern

July 2016

- Contributed to writing client sided technical specifications.
- Attended company workshops pertaining to their cyber security consulting division.
- Shadowed professional pen testers for a day.

**Saily**, iOS Developer

May-July 2015

- Assumed responsibility for critical parts of the Saily App in a small team.
- Independently built the Saily Apple watch app from scratch.
- Kept up with a fast paced agile development process that required speed and attention to detail.

**961 Beer**, Contracted iOS Developer

November 2014

- Contracted to develop the app independently, responsible for backend, frontend, design and maintenance.
- Worked with the client to define and comply with set specifications.
- Implemented network features to insure constant availability of the database locally.

**FOO\_**, iOS Developer

June-July 2014

- Contributed to the development of ongoing projects for clients making use of various custom APIs.
- Built an in-house crash-reporting tool using custom APIs to transfer the crash logs to the company's database.
- Researched facial recognition technology demonstrating the OpenCV framework with the capability of recognizing facial features such as left eye, glasses, eyebrows, etc...

### Projects & Achievements

**Apple WWDC Scholarship Winner**

July 2015

Won a scholarship awarded to 350 students based on merit. Attended labs and sessions held by Apple Engineers including the UI Design Lab. Met Apple engineers and discussed future technologies and ongoing personal projects.

**2<sup>nd</sup> Place AltCity Hackathon/Move-Counter**

May 2014

Designed, developed and pitched an app in 12 hours with the help of a designer. Other participants were aged between 18 and 30. The app I built, Move-Counter, sported the capability of recording a given move, storing it as a hash then recognizing a recorded move using the built-in accelerometer. The app was redesigned and published.

**Published a total of 11 Apps & Tweaks**

- Published 8 iOS Apps, 3 Tweaks (System modifications distributed through Cydia).
- 3 Tweaks received unprompted coverage from respectable review sources.
- Bloard (Tweak) received over a million downloads.
- Airly (App) improves on the Precision-Time-Protocol and allows precise music playback across devices; well received.

**Arduino Robot & Raspberry Pi**

Built and programmed a Bluetooth controlled, sonar equipped rover. Controlled through a custom iOS app. Experience prototyping DIY projects using Raspberry Pi.

**Television Appearance**

Featured in a segment on national television during the daily news in Arabic after having developed and published a few mobile apps at a young age.

## Personal Experience & Skills

Fluent in: French, Arabic, English, Objective-C, Swift, Python, Java. Familiar in C/C++, PHP, Verilog, Bash  
Worked with: Git, Unity, OpenCV, iOS SDK, macOS SDK, Tensorflow, JUCE, VPS Deployment, Cydia Substrate.  
Lived and worked in: Beirut, London, Toronto.  
Interests include: classical music, violin, history, running, skiing, artificial intelligence, trading, cryptography.

## Relevant Coursework

- CSC207 – Software Design (Java, Design Patterns, RegEx)
- CSC236 – Introduction to Theory of Computation (Time Complexity, Correctness)
- CSC258 – Computer Organization (FPGA, Verilog, Assembly, Low level Hardware)
- CSC209 – Software Tools & Systems Programming (C, File Processing, Shell Programming, Signals...) **IPR**
- CSC263 – Data Structures & Analysis (Algorithm Analysis, Abstract Data Types, Design of Data Structures) **IPR**
- CSC300 – Computers & Society (Ethics, Societal effects of technology)
- CSC384 – Introduction to Artificial Intelligence (Search Algorithms, Game Theory...)
- CSC343 – Introduction to Databases (SQL, Query Processing, Database Design) **IPR**
- CSC404 – Introduction to Video Game Design (Level & Model Design, AI, Graphic Elements, Audio Elements) **IPR**
- CSC401 – Natural Language Computing (N-grams, POS tagging, PERL, Markup, Speech Recognition) **IPR**
- MAT223 – Linear Algebra I (Vectors, Matrices, Spans, etc...)
- STA247 – Probability with Computational Applications (Counting, Discrete & Continuous Prob, Bivariate Distributions)