

# SEBASTIAN CAIN

iOS Developer/Designer  
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## EDUCATION

### UNIVERSITY OF WATERLOO

Honors Software Engineering  
Expected Grad. May 2022  
(5-year Co-op Program)  
GPA: none available yet

## COURSEWORK

### UNIVERSITY

SE 101 - Methods of Software Eng.  
CS 137 - Programming Principles  
MATH 117 - Calculus for Eng.  
MATH 115 - Linear Algebra  
ECE 105 - Mechanics  
MATH 135 - Proofs

### HIGH SCHOOL

AP Computer Science  
Software Development  
Systems Programming  
Computer Graphics

## SKILLS/LANGUAGES

### PROFICIENT

Swift  
Python  
C

### FAMILIAR

HTML/CSS  
JavaScript  
Java

## AWARDS

### APPLE WWDC SCHOLARSHIP

2017 Recipient

### HACKBCA III

Best Mobile App + 3rd Overall

### PENNAPPS WINTER 2016

Top 10

### HACKBCA II

2nd Overall

## EXPERIENCE

### SPRAYCHARTS LLC - COFOUNDER/CTO

NYC, New York - April 2017 to Present

Created a baseball analytics app that combines tracked graphical and situational data to create an intricate history of player tendencies. Strategic calls can then be made on the fly by utilizing many combined filters on the situational data to match the current situation, thereby taking the historical trend into account to predict the next play.

### SHIPPA - iOS DEVELOPMENT INTERN

Long Island City, New York - Summer 2016

Implemented new features for their native iOS app, including a system of custom alert controllers, Instagram API integration, theming for different types of accounts, and many other UI features.

### PLUTONIUM APPS - CONTRACT iOS DEVELOPER

Atlanta, GA (Remote) - Jan 2016 to Present

Developed and maintained several large scale applications for various clients through Plutonium Apps, including Qollaboration, 7 Weeks, and Grades.

### KEEP - iOS DEVELOPMENT INTERN

NYC, New York - Summer 2015

Worked on animations and complex user interface controls for Refill, a project for Keep whose goal was to provide a service to refill anything you need with two taps and one-day delivery.

## PROJECTS

### REPPIN - HackBCA III - April 2016

Created Reppin, a virtual personal trainer that utilizes OpenCV to track one's movement to count the number of pushups one does in real time, and uses a text-to-speech converter to count reps and sets out loud.

### SMITH - HackBCA II - Mar 2015

Developed Smith, a pattern detection engine that uses the iPhone's accelerometer to recognize different vibration patterns, which allows users to execute actions by knocking on the table that the phone is on.

### MAGICPEN - PennApps - Jan 2015

Created MagicPen, a remote drawing app that uses the built-in magnetometer in the iPhone, extracts its raw data, and converts a polar plane into a Cartesian plane in order to track a remote magnet pen's coordinates. Then, it maps the coordinates, and traces lines as you write in real-time.

### DEFLECTOR - CodeDay - Nov 2014

Conceptualized and created Deflector, a minimalistic iOS game utilizing SpriteKit's built-in physics engine. The objective of the game is to bounce balls that fall from the top to the right and left side, using a bar that you control. On launch day, Deflector was featured on iTunes as #24 in Top New Free Arcade Games.