Joseph Jacob

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EDUCATION

DUKE UNIVERSITY
B.S. in Computer Science
August 2014 - Present
Expected Graduation: May 2018
Durham, NC
Cum. GPA: 3.40 / 4.00

UNIVERSITÉ PARIS DIDEROT
Study Abroad
September 2016 - December 2016
Paris, France

THE WHEATLEY SCHOOL
September 2009 - June 2014
Old Westbury, NY
Cum. GPA: 3.96 / 4.00

LINKS

github.com/joejacob
linkedin.com/in/josephcjacob

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Design and Analysis of Algorithms
Software Design and Implementation
Computer Architecture and Design
Intro to Database Systems
Intro to Operating Systems
Open Source Software
Discrete Math for Computer Science

SKILLS

LANGUAGES
Proficient:
Java • Python • Ruby • Git
JavaScript • Swift
Familiar:
C • Scheme • SQL
HTML • Objective-C

FRAMEWORKS
Proficient:
Meteor • Ruby on Rails
Familiar:
Flask

EXPERIENCE

OPTORO | Software Engineering Intern
June 2016 - August 2016 | Washington, DC
- Learned **Ruby on Rails** by working on Optiturn, their warehouse management software
- Created the **filetype_validation gem**, which validates CSV and plain text files, has **100% test coverage**, and has **over 4,000 downloads**
- Implemented a **photo duplicate detection algorithm** that prevents similar photos from being uploaded to Optiturn

NIBBLY | Software Engineering Intern
May 2015 – July 2015 | New York, NY
- Improved Nibbly's iOS application in **Objective-C** by:
  - integrating the **Google Maps API** to allow users to input custom locations,
  - refactoring controller logic to implement a tab bar controller,
  - making performance and UI bug fixes
- Used **Flask** to manage the web app and integrate the **Yelp and Foursquare APIs** server-side
- Worked with **AdMob** and implemented user-engagement metrics using **Mixpanel** and **Appboy** to optimize CTR or conversion depending on the goal for the marketing directive

STARTING FROM SCRATCH - DURHAM | Volunteer
February 2015 – Present | Durham, NC
- Volunteers teaching local middle school students to program in the interactive language, **Scratch**, in order to increase interest in computer science

PROJECTS

TICKER STICKER | Chrome extension | Creator
August 2016 – Present
- Scans web page DOM for stock tickers and displays corresponding stock information in a tooltip
- Uses **YQL** to lazily retrieve stock data on mouseover and cache data for later use

SPAWN | Web app | Co-creator
October 2015 – Present
- Allows users to create and join spontaneous events of various types (soccer match, lunch, etc.)
- Created with **Meteor** and uses **Bootstrap** to design UI elements
- Integrates Google Maps and Facebook functionality to support location fetching and social features (adding friends, private events, etc.)

LIFERAFT | iOS | Co-creator
November 2015 | HackDuke
- Group safety app that allows users to join a group of friends, keep track of their locations, send messages, and call Ubers
- Written in **Swift** and uses **Bluetooth** to allow friends to join groups, **Google Maps API** to fetch locations, and **Uber API** to call Ubers
- Uses **Firebase** for reactive data storage for group and chat data