

# Iosef Kaver

Web: ikaver.com | Email: ikaveror@alumni.cmu.edu | Sunnyvale, CA

## EDUCATION

### CARNEGIE MELLON UNIVERSITY

MS IN COMPUTER SCIENCE

Aug '14 - Dec '15 | Pittsburgh, PA

GPA: 4.14

### UNIVERSIDAD DE COSTA RICA

BS IN COMPUTER SCIENCE

2009 - 2012 | San José, Costa Rica

GPA: 97.6

Ranked 1<sup>st</sup> in the College of Engineering

### LA COLLEGE OF MUSIC

DIPLOMA IN MUSIC PERFORMANCE

2008 - 2009 | Los Angeles, CA

Focus on Electric Bass Performance.

## COURSEWORK

### GRADUATE (CMU)

Compilers

Parallel Computer Arch. and Programming

Storage Systems

Search Engines

Machine Learning [10701]

Machine Learning With Large Datasets

Distributed Systems

Web Application Development

Algorithms

Computer Systems

### UNDERGRADUATE (UCR)

Operating Systems

Artificial Intelligence

Computer Networks

Databases I and II

Software Engineering I and II

Computer Architecture

Operations Research

## SKILLS

### PROGRAMMING

Proficient

Java • Hack

Familiar with

OCaml • C • C++ • Python

MATLAB • SQL • Bash

Javascript • PHP • Swift • Objective-C

### TOOLS

Git • SVN • Hadoop • Spark • MPI

OpenMP • ISPC • CUDA • Xcode • MySQL

DBMS • iOS SDK • Instruments • KIF

XCTest • Cocoa Touch • gdb • Guice

Unity3D • vim • Maven

## EXPERIENCE

### FACEBOOK | SOFTWARE ENGINEER

January 2016 - Current | Menlo Park, CA

- Search Product Infrastructure team, focusing on search speed and reliability.
- Shipped multiple improvements across the stack to reduce typeahead and search result pages latency, as well as CPU and memory footprint.

### CARNEGIE MELLON UNIVERSITY | TEACHING ASSISTANT

August 2015 - December 2015 | Pittsburgh, PA

- Graduate Teaching Assistant for **Machine Learning With Large Datasets**.
- Professor: **William Cohen**.

### LINKEDIN | SOFTWARE ENGINEERING INTERN

May 2015 - August 2015 | Mountain View, CA

- Wrote and reviewed code in Swift, taking full ownership of two features.
- Built the middle tier code for the 'mentioned in the news' stories in Feed.
- Lead model optimization efforts which resulted in 40% reduction in payload size for the LinkedIn Feed.

### CARNEGIE MELLON UNIVERSITY | TEACHING ASSISTANT

January 2015 - May 2015 | Pittsburgh, PA

- Teaching Assistant for **Distributed Systems**.
- Professors: **Mahadev Satyanarayanan** and **Padmanabhan Pillai**.

### FAIR PLAY LABS | SOFTWARE ENGINEER

August 2012 - May 2014 | San José, Costa Rica

- Developed two games from the ground up for iOS and Android platforms with a team of 8 artists and 4 developers, achieving over 1 million downloads.
- Designed and implemented a solution to reduce initial binary size by 30%.
- Automated the build pipeline for all platforms, achieving daily build delivery.

## PROJECTS

### CLOUD FILE SYSTEM October 2015 - December 2015

Designed and implemented a FUSE-based file system that integrates local and cloud storage services (such as S3). The file system pushes files which are larger than a certain threshold to the cloud, while abstracting this away from the user. Segment-level deduplication is implemented using Rabin fingerprinting. Users can also create, delete, list and restore snapshots of the file system.

### MAPREDUCE FRAMEWORK October 2014 - November 2014

Developed a MapReduce framework from scratch capable of dispatching parallel maps and reduces across multiple hosts, with concurrent job management, replication-enforcement, dynamic cluster resizing and failure recovery.

## AWARDS

2013 Highest overall GPA of the College of Engineering, Universidad de Costa Rica

2012 1<sup>st</sup> place. SIMBOLO National Programming Contest, Costa Rica

2012 2<sup>nd</sup>/35,000 highest annual GPA, Universidad de Costa Rica

## PUBLICATIONS

### MULTIPITCH ESTIMATION ALGORITHM 2013

"A multipitch estimation algorithm based on fundamental frequencies and prime harmonics." Proceedings of the Sound and Music Computing Conference, Stockholm, Sweden, pp.86-91.