# Karan Kajla

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## **Education**

- ♦ University of California, Los Angeles B.S. Computer Science, June 2016
  - Cumulative GPA: 3.17/4.0, Upper-Division CS GPA: 3.46/4.0
  - CS Coursework: Algorithms, Data Structures, Operating Systems, Networks, Databases, Data Mining, Programming Languages,
    Scalable Internet Services, Artificial Intelligence, Web Applications, Software Engineering, Parallel and Distributed Computing

## Skills

- ◆ Languages: Ruby, C++, C, Java, JavaScript, SQL
- ◆ Technologies & Tools: Rails, Node.js, React, MySQL, MongoDB, Git

# **Experience**

# Software Engineer - AppFolio, Inc.

August 2016 - Present

Full-stack engineer developing and maintaining AppFolio Property Manager, AppFolio's primary SaaS product for commercial and residential Property Managers

- Work in a small product development team relying on agile practices and close interaction with customers to discover and develop new product features using Ruby on Rails, MySQL, and JavaScript
- Implemented a highly requested data reporting feature for one of our largest customers using an internal parallel job scheduling framework
- Researched, designed, and developed a brand new, improved property maintenance module for our existing platform using React and Ruby on Rails to allow large customers to streamline management of their in-house maintenance teams
- ♦ Implemented a self-help chat bot using Twilio and Wit.ai for our annual Hack Day to aid customers in performing complicated tasks

# Software Engineer Intern - DealerSync, Inc.

June 2015 - September 2015

Full-stack engineer at an early stage startup, part of a lean 4 engineer team responsible for designing, developing, and maintaining DealerSync's core automotive dealership management platform

- Worked on the full stack of the core platform: front-end, middle-tier (C# / .NET MVC), and backend (SQL Server)
- ♦ Improved speed and memory efficiency of the email templating engine by re-implementing it using a more performance-oriented string replacement library which decreased overall CPU and memory usage and made the template engine more robust
- Implemented highly requested features for the platform's financial modules, leading to increased online loan document signing
- Implemented Dependency Injection across key pieces of the codebase, promoting consistent and maintainable code

# **Projects**

#### HaaS: Helper as a Service

haasavocado.herokuapp.com

HaaS is an intelligent personal assistant that aims to take care of complex tasks for users such as tracking and updating users on intransit packages or suggesting meals to make given a list of ingredients on hand

- ♦ Integrated with Facebook Messenger to provide a rich and robust chat interface
- ♦ Integrated Facebook's Wit.ai service to perform Natural Language Processing on messages sent by the user to understand the intent and context of each message
- Architected and implemented a REST API using Node.js to manage users, service user requests derived from messages received through Messenger, and reply to those messages with the appropriate information

#### Arpeggio: A Scalable Peer-to-Peer Musical Instrument Rental Marketplace

Web Application

An online marketplace developed for a Scalable Internet Services course where users can rent out musical equipment and search for equipment to rent based on location and several other product filters (Airbnb for musical instruments)

- Worked in a team of four students using weekly sprints to incrementally build the application consisting of a JavaScript front-end, Ruby on Rails middle-tier, and MySQL back-end in 10 weeks
- Implemented a cart-based shopping experience and a peer-to-peer payment system using Braintree
- Scaled the application using strategies such as caching, database sharding, and query optimization, then compared the effects of 'scaling-up' versus 'scaling-out' as the topic of a course <u>paper</u>

Fit Bruin Calorie Counter Web Application

A web application that utilizes UCLA's dining hall nutrition fact information and allows users to create personal profiles which have a diet plan tailored to their needs and vital statistics so they can track their daily nutrition

- Wrote an HTML parser to get nutrition information from UCLA's dining website, structured the data, and stored and queried it from a MySQL database
- Implemented and hosted the backend using Python (Django), MySQL, Amazon Web Services EC-2 micro-instance, and Apache Server. Implemented an interactive, responsive, and easy-to-use user interface using HTML, CSS, and JavaScript
- ♦ Fit Bruin was featured in an article in UCLA's campus newspaper, the Daily Bruin, and has over 6,000 visits and 11,000 page views

