

#### Aspiring Software Engineer · Student

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## Key Skills\_

Fluent in HTML5, CSS3, JavaScript, Python, Flask, Java, SQL, XML, Android, Bash

Working knowledge of Less, jQuery, PHP, Redis, SQL, Postgres, SQLAlchemy, Jinja

Tools used Vagrant, Docker, Ansible, Selenium, Git, Linux, Ubuntu

- Ability to thrive in a fast-paced work environment
- Excellent problem solving skills, with the ability to complete tasks in the most efficient way
- Able to master different techniques and understand technical processes quickly
- Able to work efficiently on own initiative as well as able to contribute effectively within a team

## **Education**

### King's College London (University of London)

September 2014 - Exp. August 2018

MSCI COMPUTER SCIENCE Strand, London

• Key modules: Software Engineering Group Project, Cryptography and Information Security, Internet Systems, Distributed Systems, Database Technology, Software Engineering of Internet Applications, Network Security, Artificial Intelligence, Computer Vision

Nower Hill 6th Form September 2012 - July 2014

A-LEVELS Pinner, London

• A\* in Mathematics, A in Computing, B in Further Maths, B in Physics

· AS-Level: A in an EPQ on 'What makes a machine intelligent?'

# Work Experience \_\_\_\_\_

EDITED June 2016 - September 2016

SOFTWARE ENGINEERING INTERN

Farringdon, London

- Developed and tested, from scratch, two caching databases for web scraped data and their translations. Allows faster translations and reduces cost of translation API.
- Fast cache: Redis database used for fast retrieval. Stores most recently used translations.
- · Long term cache: MariaDB Galera Cluster with SQLAlchemy master-slave configuration. Stores all translations done before.
- Created a Private Python Package Index that is stored in a AWS server and accessible only by employees; contains all their proprietary python
  packages.
- Wrote a migration script: Modify all python packages to use the new system using RegEx; create a release bash script to release on GitHub and upload to new system; release all packages with changes.
- Developed package to identify any erroneous data stored in the database caused by errors when web scraping and apply a delta to fix the value with an extrapolated one.

MyKidsy Coding Classes

March 2015 - November 2016

CODING TUTOR

TEACHING ASSISTANT

Google Campus, Shoreditch, London

- Taught Scratch in the beginner class and HTML, JavaScript in the advanced class
- Lead classes with 5-10 students and their parents
- Debugged code, explaining mistakes and answered questions from students

### **GCSE Computing, Nower Hill High School**

September 2012 - April 2014

**Gerrads Cross, London** 

Harrow, London

• One-to-one support to struggling/disruptive students, teaching HTML5, CSS3, JavaScript and Java

• Emphasis on debugging code for the entire class (approx. 30 pupils), reinforcing material taught in class, teaching efficient programming practice, explaining mistakes and answering questions from students

Citrix Systems UK Ltd. 24th June 2012 - 28th June. 2012

• IT department: Shadowed technicians, working with server management and customer service.

- Testing department: Reviewed and edited design documentation for newly created Android application.
- Sales department: Assisted in setting up for an international sales presentation for the new Android application.
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- Engineering department: Peer programmed with another intern, a self-help website for Citrix customers to help solve common problems using JavaScript and JQuery.

DECEMBER 13, 2017 VIKASH KOTHARY · RÉSUMÉ

**Projects** 

#### **Movie Narrator Python Application - GitHub**

February 2017 Southampton, UK

**TEXT GENERATION DEVELOPER** 

- Winner of the Bloomberg Prize at the SotonHack 2.0 hackathon event
- · A narration application that used the ffmpeg library to sample images from a video; run Google App Engine image recognition and generate sentences to explain the scene
- · Used an audio description dataset to build a model for sentences then generating Markov chains based on the image recognition keywords.
- · Overcame the limited amount of training data available for the model by web scraping the descriptions of related videos on YouTube and adding it to the model

#### **KCL India Society Website - GitHub**

August 2016

SOLO DEVELOPER / MARKETING COMMITTEE MEMBER

Strand, London

- A portfolio website created by me to improve the society's online presence.
- Built using HTML5 Boilerplate, Bootstrap, JavaScript, Less to generate code that is clean and easy to maintain
- · Website optimized for mobile and sharing through social media such as Facebook and Twitter using meta tags
- Gathers data for the society using Google Analytics

#### **Languine Android Application - GitHub**

February 2016

TEAM LEADER / APP DESIGNER

Strand, London · A language application that delivers Spanish lessons to the user with a content management system to allow the client to add/remove lessons.

- The project manager for a team of 8 where I scheduled meetings, delegated tasks and liaised with the client
- · I designed the entire user interface, which was implemented by my team and created the entire CMS backend

## Extracurriculars\_

#### **KCL Robotics Society**

Strand, London

**VP OPERATIONS** 

COMMITTEE MEMBER

January 2015 - July 2017

- · Ran workshops: basic electronics (twice), Lego Mindstorms (twice), Arduino cars (once for university students, once for younger students)
- · Assisted a Robotics PhD student in running a workshop for building automation robots in the agricultural industry
- · Set-up and maintained society operations: debit card, domain emails, password manager, internal/external calendar, slack, shared data storage, web hosting, GitHub, social media

**KCL Tech Society** Strand, London

• Taught a 8-week beginner workshop on Android for beginners

July 2016 - July 2017

- Hosted a 12 hour hackathon (MLH Local Hack Day) at KCL in a team of 4 with 30+ participants

## **Achievements**.

Hackathon Prizes, HackTrain 4.0; SotonHack 2.0; HackKing's 2.0; GreatUniHack

Shodan Black Belt, Jim Wilson's Karate Academy

ASA National Swim Awards, Levels 1 - 6

Harrow Schools' Swimming Certificates, Beginner, Intermediate, Survival, Water Safety Skills

**Duke of Edinburgh Silver Award**,

The Challenge Award,

National Citizen Service Award,

UK Mathematical Challenge, Junior - Gold Certificate; Intermediate - Silver Certificate; Senior - Bronze

Certificate

## **Interests and Activities**

In addition to my education and work, I have a lot of interest in various other things with my health being one of them. I enjoy regularly visiting my local gym after breakfast combining strength training and high intensity cardio which helps me stay energised throughout the day. During the workout, I listen to popular non-fiction audio books or podcasts to advance my knowledge. I have also been learning to cook various cuisines of food since this is another key interest of mine. I am even making my way through a beginners' cookbook, aiming to make a new dish every week or two to awaken my tastebuds. To wind down, I love TV shows or movies of various genres; whether it's action, comedy, romance, sci-fi and/or fantasy I appreciate them all, enjoying them on my PC that I built myself.

# References on Request\_