an2756@columbia.edu 917-912-5831 linkedin.com/in/akshaynagpal akshaynagpal.me

354 W 110 St, Apt 1A, New York, NY 10025

EDUCATION

Columbia University, New York, NY

M.S. Computer Science

Expected Dec '17

Courses: Analysis of Algorithms, Cloud Computing & Big Data, Advanced Software Engineering, Cognitive Computing

Northcap University, Gurgaon, India

B.S. Computer Science (with Distinction)

Jun '16

Select Courses: Data Structures & Algorithms, Data Mining, Software Engineering, Adv. Database Mgmt. Systems

TECHNICAL SKILLS

Languages: Java, PHP, Python, JavaScript, HTML5, R

Databases: MySQL, PostgreSQL, Oracle SQL

Libraries: Bootstrap 3, Phaser.JS, Canvas.JS, OpenCV

Technologies: Heroku, AWS Cloud, Git, PhoneGap

WORK EXPERIENCE

Columbia University IT, New York, NY Assistant Programmer

Oct '16 - Present

Part of Teaching & Learning Applications team for a project using Flask (python framework), JavaScript & SQL

Media Lab Asia, New Delhi, India

Software Engineer Intern - R&D

Summer '15

- Built a focused search engine for research journals using R (Shiny) as a part of a larger medical analysis application.
- Generated search results using string matching and collected usage data by tracking clicks and search box inputs
- Built RgScholar: Open Source API to integrate Google Scholar search functionality into R applications

Karmatech Mediaworks, New Delhi, India Software Engineer Intern - Web Apps

Summer '14

- Implemented media upload and thumbnail creation interface, social login APIs and form input validation using PHP
- Designed and implemented MySQL Stored Procedures

SELECT PROJECTS

Real Time Tweet Map (Java, PHP, JavaScript, AWS Elastic Search, Elastic Beanstalk)

Oct '16

- Extracted tweets containing a keyword using Twitter API and stored them in AWS Elastic Search
- Rendered heat map in real time using tweet locations, deployed web app on Elastic Beanstalk

LionMart - Reseller Marketplace (Java, Play Framework, MySQL, JavaScript)

Sep '16 - Present

- Implementing an advertisement platform for resellers using MVC architecture in Java Play Framework
- Using Travis-CI for continuous integration and JUnit for unit testing

Code Profiler (PHP, JavaScript, Canvas.JS, Bootstrap, PostgreSQL, Heroku)

Aug '16

- Built a tool for Github code analysis using Github API v3 via CURL module: used Canyas.JS for visualization
- Deployed on Heroku cloud and database maintained using PostgreSQL

Move & Block (JavaScript, Phaser.JS, HTML5)

May - Jun '16

- Conceptualized and built a two player board game using Phaser framework & JavaScript
- Ported to Android using PhoneGap

Word2Number (Python)

Voice Controlled Personal Assistant (Python, Google Speech API, Jasper, Raspberry Pi)

Aug '15 - May '16

- Implemented through voice commands: face detection (OpenCV) and similarity calculation(using normalized cross-correlation), Wikipedia search, calculator, weather update, email reader and music player
- Won Best Project Award in Hunt for India's Best Academic Project 2016

Dec '15 - Present

- Developed open-source python module to convert number-words to numeric digits
- Wrote unit testing script for contributors to the Github repository using python unit-test module

Statistical & Sentiment Analysis of Factors Affecting State-wise Tourism in India (Python)

Sep - Dec '15

- Mined and cleaned data and tweets, both manually (using Python CSV module) & with the aid of Kimono API
- Performed sentiment analysis on tweets using NLTK (Natural Language Toolkit) in Python (Received A+ grade)