Deshraj Yadav

http://deshraj.github.io
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EDUCATION

JSSATE NOIDA
BTech in Computer Science
Aggregate Percentage: 78%

KENDRIYA VIDYALAYA
Class XII, CBSE: May 2012 | Manauri, Allahabad
Aggregate: 85%
Class X,CBSE: May 2010 | Manauri, Allahabad
CGPA: 9.4/10, 3rd in School

LINKS

Github:// **deshraj**
LinkedIn:// **deshraj-yadav**
Twitter:// **@deshrajdry**
Blogger:// **deshrajdry**

INTERESTS

Machine Learning, Distributed Computing, Computer Vision, Data Science

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Design and Analysis of Algorithms
Operating Systems
Object Oriented Programming
Artificial Intelligence
Database Management System
Computer Architecture
Parallel Algorithms
Coursera:
Machine Learning
by Andrew Ng
Learn to Program: The Fundamentals
by Jennifer Campbell

EXPERIENCE

MACHINE LEARNING AND PERCEPTION LAB, VIRGINIA TECH
RESEARCH SCHOLAR
June 2016 – Present | Blacksburg, Virginia
- Working on problems that lie at the intersection of Computer Vision, Machine Learning and Natural Language Processing.
- Also, working as Teaching Assistant for 'Introduction to Machine Learning Course'.

CLOUDCV | GSOC 2016 MENTOR & CODE MAINTAINER
September 2015 – Present | Virginia Tech, Virginia
- Mentored two projects, along with onboarding students, helping them understand the codebase and guide them for proper project planning.
- Responsible for managing the distributed computing server, building new APIs, Demonstrations and helping out new contributors for getting started with CloudCV.

GOOGLE | GOOGLE SUMMER OF CODE STUDENT
May 2015 – August 2015
- Selected for GSOC 2015 under CloudCV Organization.
- Built authentication system, designed a new Database and wrote REST APIs.
- Worked on NVIDIA's Deep Learning Framework DIGITS and responsible for integrating it with CloudCV to provide workspaces for the Researchers, Data Scientists and Developers.

FRATMART | BACKEND DEVELOPER
August 2014 – December 2014 | Noida
- Started my own venture when I was a sophomore
- Responsible for writing product's Tech Stack from scratch, managing the servers, database management and other backend scripting tasks.
- Tech Stack details: Python, Django, MongoDB, Facebook APIs, Javascript, Nginx, AWS.

PYTHON SOFTWARE SOCIETY OF INDIA | OPEN SOURCE CONTRIBUTOR
March 2016 – August 2016
- Core Contributor at Python Software Society of India's project "Wye". Responsible for setting up the authentication system and managing it for the whole project and fixing other bugs.

CITYFLO | SOFTWARE DEVELOPMENT INTERNSHIP
December 2015 – February 2016 | Mumbai

- Responsible for setting up Test Driven Development for whole codebase of 10,000 lines and writing REST APIs for the Customer and Drivers Application.

SIFTR LABS | PRODUCT DEVELOPMENT INTERNSHIP
September 2015 – December 2015 | Noida

- Responsible for building REST APIs and creating an Android Application which communicates with beacons to perform actions.
- Also implemented A-star algorithm to get real time position of a person using Beacons(Low Energy Bluetooth device) signal strength.

SKILLS

PROGRAMMING
• Python • C/C++ • C# • Lua
• Javascript • Shell Scripting

Software Development/Others:
• HTML • CSS • • Django
• AWS EC2, S3, EBS, RDS, VPC
• Nginx • Git • Celery • RabbitMQ
• Redis • Docker • MySQL
• PostgreSQL • MongoDB
• Elasticsearch • OpenCV
• Torch • Android
• Windows Phone development

TALKS AND SEMINARS

Talk on CloudCV Projects, Google
Tech Corners, Sunnyvale
CloudCV demonstrations, CVPR 2016
Getting started with GSOC, GDG
JSS Noida

EXTRA-CURRICULAR ACTIVITIES

Head Organizer of Hackathon 2015,
sponsored by Microsoft Finland
Founder of Open Source Developers
Community, JSS Noida
Codewars Organizer(Overnight Code-A-Thon)

ACHIEVEMENTS AND AWARDS

• Felicitated for getting highest paying job from Campus of JSS Noida since its establishment in 1998
• Travel Scholarship recepient for Google Summer of Code Mentor Summit, 2016
• National Means Cum-Merit Scholarship Recipient with State Rank 13 (Offered by Ministry of Human Resource and Development, Government of India)
• Prime Minister Scholarship Scheme recepient offered by Ministry of Defence, India
• Winner of Cassiopeian Wars 2014 organized by Microsoft Mobile Innovation Labs
• First Runner Up at HACK-A-THON SUMMER 2014 organized by Google Developers Group Lingaya's University. Won prize of worth Rs. 25,000
• Second Runner Up in Linux Challenge organized at Netaji Subhash Institute Of Technology(NSIT Delhi)
• First Runner Up at Junkyard Wars organized at Deen Dayal Upadhyay College, Delhi University

PROJECTS

GRADIENT-WEIGHTED CLASS ACTIVATION MAPPING (GRAD-CAM) DEMO

• Grad-CAM highlights regions of the image the VQA model looks at while making predictions. Given an image and a caption or question about that image, the model shows where it looked while doing prediction.
• Built the demo from scratch involving setting up the backend pipeline, setting worker queues, building the Python Lua bridge and writing the frontend code.
• Live demo http://gradcam.cloudcv.org

VISUAL QUESTION ANSWERING TWITTER BOT

• Given an image and a natural language question about the image as a tweet mentioning @deshrajdry, the bot provides an accurate natural language answer as a reply to that tweet.
• This project involves use of Twitter Streaming API for replying and RabbitMQ for running the prediction job in a worker.

DIVERSE BEAM SEARCH DEMONSTRATION

• The demo proposes a diversity-promoting replacement that produces sequences that are significantly different from beam search.
• Live demo link: http://dbs.cloudcv.org

JSS CONNECT WEB APPLICATION

• Built a django based web app for interaction between the college administration and students.
• Serves more than 4,000 requests daily.
• Live project link: http://210.212.85.155

PUBLIC HEALTH SURVEILLANCE SYSTEM

• Django based web application for analyzing the areas where the Swine Flu disease is increasing with the help of Google Maps API and sending email alerts to schools and Hospitals located in between the 5km range.
• Heat maps are also generated with help of Google Heat Maps for visualizing the areas which are more affected.

PYURL (URL SHORTENER)

• A customized URL shortening service that lets the user to get custom shortened URL that he wants.