## Rajashekar Reddy Aluka

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## **EDUCATION**

## Arizona State University (ASU), Tempe, Arizona

Expected Dec 2021

• Masters in Computer Science, GPA: 4.22/4

Coursework: Cloud computing, Data processing at scale, NLP, Data mining\*, Data visualization\*, Algorithms\*

#### International Institute of Information Technology (IIIT), Hyderabad

Jul 2013 - May 2017

• B.Tech in Computer Science and Engineering, CGPA: 7.28/10

## TECHNICAL SKILLS

Languages: C++, Python, C, JavaScript, Java, PHP

Tools & Frameworks: Flask, Django, Celery, NodeJS, ReactJS, VueJS, Elastic Search, PostgreSQl, MySQL, SkLearn, Tensorflow, pyTorch, Web2py, CodeIgniter

## PROFESSIONAL EXPERIENCE

#### ASU Decision Theater Network

Mar'20 - present

Graduate Software Developer

• Pulse: Working on developing a live tweet stream collection tool which works based on the distributed computing which is built using python Flask and Celery with broker as RabbitMQ.

Bully Blocker May'20 - Aug'20

Graduate Research Assistant under Dr. Yasin N. Silva, School of Mathematical and Natural Sciences

• Developed an action point application in IOS with backend API server code in PHP and database in MYSQL.

# Qualcomm Inc Jun'17 - Jan'20

Software Engineer

- Developed a machine learning model for regression problem using MLP, Gradient Booster, XG Boost, SVM, Simple linear to predict clock cycles per packet (CPP) based on metrics like Q6 clock, TCM size, DDR clock, L2 Size, Threads.
- Worked with RD San Diego team on 5G timelines data to process the large chunks of data using distributed processing to a human-readable format. To show the data insights, I developed a dashboard in Django (python) with backend using PostgreSQL database.

IIIT Hyderabad Aug'16 - Nov'16

Head Teaching Assistant, Under Prof. Kamalakar Karlapalem, Centre for Data Engineering

• Worked as a head teaching assistant for Intro to databases course for a class of 230 strength in helping prof by conducting tutorials, designing assignments, evaluating their assignments and exams.

### **Progress Software**

May'16 - Jul'16

Data SQL Development Intern

• Developed an interface provider for Open Access SQL engine in C++ for the rest data source Eloqua.

## Wazzat Labs Sep'15 - Oct'15

Software Developer Intern

• Developed a Fashion Visual Recognition API Demo to show the startup's idea of how e-commerce products can be searched by giving image as an input. A demo image of the same: https://goo.gl/nBRd3J.

Justkapture
Software Developer Intern

Jun'15 - Jul'15

• Developed an admin interface which shows weekly/monthly stats of the campaign of Justkapture Advertisers. Optimized the response loading time of website from 40 secs to 2 secs by using AJAX calls.

# Shoppers Express

Dec'14 - Jan'15

Web Developer Intern

• Worked in a team of 4 people to develop a cashback website using PHP codeIgniter framework with MYSQL as database and bootstrap as front-end.

## Academic Projects

- Smart Bill savings: Developed a PAAS website in flask to store the receipts and create grocery list based on the data extracted from an image using google OCR.
- Pythia: Enhanced the visual question answering, LORRA model by adding instance segmentation, N-gram and spell correcting OCR leading to an increase in model accuracy by 3%.
- Edge Computing: Developed a system which can auto scale the resources based on the number of requests and reduce the cost of using AWS resources.
- Wikipedia Search Engine: Given a wiki dump of 42GB, this project retrieves the top 5 documents corresponding to the given query. The first is to create an index file and use TF/IDF-based heuristics to rank relevant wiki pages.