2776 Moorhead Ave, Boulder, CO 80305

# PARAMJOT SINGH

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#### **EDUCATION**

## Boulder, CO University of Colorado Boulder

Fall 2017 – Spring 2019

- M.S. in Computer Science
- Coursework: Natural Language Processing; Algorithms; Machine Learning (Spring '18); Computer Vision (Spring '18)

## Manipal, India

# **Manipal Institute of Technology**

Fall 2010 - Spring 2014

• B.E. in Computer Science

GPA: 3.66/4 (9.16/10.00)

Top 10% of the class

• Undergraduate Coursework: Operating Systems; Algorithms; Data Structures; Digital Image Processing; Programming Languages; Databases; Parallel Programming; Comp. Architecture

## LANGUAGES AND TECHNOLOGIES

Java; C; C++; SQL; Python

Hibernate; Git; Jenkins; Linux; Eclipse; Docker

Areas of Technical Interest: Natural Language Processing, Design of Algorithms and Machine Learning

#### **EMPLOYMENT**

# Teaching Assistant University of Colorado Boulder

Fall 2017 - Present

- Course: High-Performance Scientific Computing
- Designing the programming assignments in OpenMP, MPI & OpenCL and helping students with C/C++ coding.

### **Senior Software Engineer**

#### **Hewlett Packard Enterprise R&D India**

Fall 2014 – Summer 2017

- Designed and developed the Execution engine and REST APIs for the DevOps solution 'HPE Codar/CSA' that provides automation and release management of complex multi-tier applications across the lifecycles
  - Reduced deployment time of the applications by over 200% (In case of IKEA from 5 hours to 2 minutes 27 seconds)
- Worked with different teams located in India, Czech Republic, Israel and US

Intern Sonus Networks Summer 2013

- Developed application to generate graph using raw data fed from Sonus Session Border Controllers (SBCs) to plot memory and CPU utilization graph
  - Helpful in observing the SBC resource consumption and raise an alarm, if needed, based on the threshold values
- Automated the EMA cases using Selenium and developed Perl scripts along with executing the test cases

# INDEPENDENT PROJECTS

- Geany: Working on Amazon Alexa skill for a smart assistant. Have developed various other skills before
- **Cloudy:** Developed chatbot for CSA/Codar, which was released in beta. It communicates with remote CSA machine through REST APIs and fulfils the user's requests interactively
- **R-View:** 'RView: Remotely monitor students working in lab' which focused on building a scalable comprehensive system which can be used to overall monitoring and assessment in a lab environment
  - To make it more efficient, I introduced the algorithm to find the difference between subsequent screenshot images, so as to reduce the bandwidth consumption if client machine is idle
- **OCR Pad:** Project developed using OpenCV library, in which user can draw a character on a scratch pad and the input gets analyzed against the training data for valid character with maximum amount of resemblance using kNN algorithm and returns result along with match percentage to user.

#### ADDITIONAL EXPERIENCE AND AWARDS

- **Submitted patent in US and India (2017):** Currently in-review, under the title "Customizable progression of builds for an application across the lifecycle stages"
- **Co-authored a research paper (2016)** on "DevOps Bridging the world of Containers and VM" and presented during Paper Presentation at HPE Parasparam
- **Finalist in HPE Microsoft Hackathon:** Developed windows 10 based UWP app to replace orthodox access card system to bring in efficacy at workplace
- Publicity Head for Indian Society for Technical Education and Coordinator for LUG Manipal