

# Kuldeep Luvani

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## **OBJECTIVE**

Seeking a full-time position that would allow me to utilize my around 3.5 years of experience and skillset and intensify the core understanding of algorithm development, machine learning algorithms and data simulation.

## **WORK EXPERIENCE**

### **Research Project - AIRtouch Keyboard** (Aug,2016 – June,2017)

- Created an amazing wearable keyless computer keyboard that uses machine learning techniques.
- This gadget made from integration of sensors and machine learning technologies like Hidden Markov Chain, Viterbi Algorithm, Corpus word prediction, MLE and built predictive model.

### **California State University, Long Beach – Research Assistant** (May,2016 – Jan,2017)

- Developed an advance computational model to implement computer automation for dual x-ray image processing techniques, pattern classification and data mining to detect nuclear substance in cargo containers.
- Implemented K-mean clustering technique to demonstrate unsupervised classification technique with color based image segregation and canny edge detection techniques.

### **eInfochips – Design Engineer** (Feb,2013 – Mar,2015)

- Worked on designing of hardware product and implemented software from requirement to production and commercial deployment.
- Integrate and validate product design and code. Analyze and enhance stability, scalability and efficiency of system by troubleshooting embedded targets Experienced in agile and waterfall methodology.

## **PROJECTS**

### ➤ **Movie Recommendation Engine**

- Implemented data analysis on movie database to provide smart recommendation based on user ratings database.  
Language : Python, R Technology : Pearson similarity

### ➤ **Probabilistic data model of Power House Management System**

- Used predictive modeling and optimization on raw data with Independent Monte Carlo simulation and queuing theory techniques. Derived statistical data of power failure and power station upgrade priority.

### ➤ **Maze solver Robot**

- Designed a robot which can solve the maze and find the shortest path. It includes an algorithm to choose a path, sensors to detect obstacles and microcontroller.

### ➤ **Robo-Car**

- We built a robo-car that could recognize ball colors and follows them. Our design includes Arduino board, camera device and image processing techniques. Used MATLAB for simulation and coding.

### ➤ **Project ARA – Modular Cell Phone**

- For an innovative modular cell phone concept, we build USB module which is used to design and develop other Project ARA modules.
- Created a design with 3/3A and 0.6mm thick board design having 8 layers. Improved beta design by creating a new style on board resister.

### ➤ **Surveillance and Security Road Recorder Device**

- Engineered a product, used for Mass transit surveillance. Gathered information from software team and managed client relation. Reduced power consumption up to 30% by software activity handling.

## **EDUCATION**

Masters of Science in Computer Science – California State University, Long Beach (Aug- 2017)

Bachelors' of Technology in Electronics – Charotar University of Science and Technology (May-2013)

## **Skills:**

**Languages:** Python, R, C, C++, SQL, Java, Assembly Language, Shell scripting

**Tools:** JetBrains, R Studio, MATLAB, Weka, aRTist, Github, Eclipse, Keil

**Key Concepts:** Algorithm and Data Structures, Data simulation and modeling, Statistical data analysis modeling (Pandas, matplotlib, scikit-learn, Scipy, Numpy, Mlpy, tensorflow, RNN), Machine learning techniques, Image Processing, Signal Processing