# **Kuldeep Luvani**

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https://kuldeepluvani.github.io/

#### **SUMMARY**

- 3+ years of experience in hardware design, algorithm development, deep learning, machine learning and data modeling.
- Proficient in Python programming with strong understanding of designing and training machine learning models.
- Good experience in developing Supervised, Unsupervised and Reinforcement learning models using high end python libraries like sci-kit learn, tensoflow, keras, cafee and pytorch.
- Good knowledge of Image processing, Natural language processing, Signal processing, Statistical data analysis, Probabilistic data modeling and simulation and Apache kafka on AWS and linux platform.
- Secured a place in top 20% hackerrank algorithm solvers.

#### **EDUCATION**

Masters of Science in Computer Science – California State University, Long Beach (Expected Dec 2017) Bachelors' of Technology in Electronics – Charotar University of Science and Technology (May 2013)

### **PROFESSIONAL EXPERIENCE**

### California State University, Long Beach - Research Project (Aug 2016 - Currently)

- Created an amazing wearable keyless computer keyboard that uses machine learning techniques using Python OOP.
- 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 – Graduate Candidate (Aug 2015 – Dec 2017)

- Movie Recommendation Engine: Analyzed movie data to provide smart recommendation based on user ratings.
- Language: Python (OOP), R Algorithm: Pearson similarity
- **Distracted Driver Detection:** Build a convolution neural network that detects distracted driver and classify its type of distraction.

Language: Python (OOP), R Technology: CNN(VGG16), Classification, AWS, keras

- **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.
- Time Series Prediction Stock Prediction Engine: Developed a data science prediction engine to predict exchange rates and corresponding stocks

Language: Python (OOP), R Algorithm: Regression, ARIMA Technology: sklearn, tensorflow

- Twitter Sentimental Data Analysis: A text analysis algorithm to classify polarity of any tweet using NLTK

Language: Python (OOP), R Algorithm: Sentiment analysis Technology: NLTK, Twitter API

### 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 using Python OOP.

# 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.
- For an innovative modular cell phone concept, we build USB module which is used to design and develop other Project ARA modules.

#### SKILLS:

**Languages**: Python, R, C, C++, SQL, Java, Assembly Language, Shell scripting **Tools**: JetBrain, R Studio, MATLAB, Weka, aRTist, Github, Eclipse, Keil