# Konark Jain

Github://kongr | LinkedIn://konarkj konarkjaing8@gmail.com, konark.145@iitg.ac.in | +91 9957997211 Portfolio: http://kongr.github.io

## **EDUCATION**

## **GUWAHATI**

BTECH IN ELECTRONICS AND **ELECTRICAL ENGINEERING WITH MINOR** IN MATHEMATICS

Expected Apr 2020 | Guwahati, India Major GPA: 8.56 Minor GPA: 8.31

#### MVN SCHOOL, ARAVALI HILLS

Grad. May 2016| Faridabad, India Senior Secondary Result: 93.0% High School Grade: 10.0

## **COURSEWORK**

#### **UNDERGRADUATE**

Mathematical Statistics Scientific Computing Advanced Linear Algebra Pattern Recognition & Machine Learning Probability and Random Processes Advanced Control Systems Modern Algebra

#### **MOOCS**

Machine Learning Deep Learning Convolutional Neural Networks Natural Language Processing Bayesian Methods for Machine Learning Data Structures and Algorithms Reinforcement Learning

## **SKILLS**

Programming Languages:

Python • C++ • MATLAB

Python Libraries:

Tensorflow • Keras • PyTorch • Pandas

Web Technology:

HTML • CSS

Miscellaneous:

Android Programming • LATEX • MySQL

Operating Systems:

Linux • Windows

## **FXPFRIFNCF**

## INDIAN INSTITUTE OF TECHNOLOGY, JP MORGAN & CHASE | QUANTITATIVE RESEARCH INTERN

May 19 - Jul 19 | Mumbai, India

- Worked on topics of Machine Learning with outlier handling for Market Risk Prediction as a part of the Market Risk team.
- Developed various regression algorithms to estimate and replace very expensive services required by the firm for risk calculation in Commodities LOB.

#### THE UNIVERSITY OF SYDNEY | RESEARCH INTERN

May 18 - Jul 18 | Sydney, Australia

- Developed algorithm for Parallel Tempering on Bayesian Neural Nets and implemented it with multi-threading cutting down the running time to half.
- Run time was then reduced by another factor of two by using surrogate assisted optimization.

#### **DRDO** | RESEARCH INTERN

Dec 17 - Jan 17 | New Delhi, India

- Developed a Convolutional Neural Network architecture for unconstrained face recognition on multiple datasets for real time applications.
- Performance of the network developed in Tensorflow matched the state of the art methods achieving close to perfect accuracy on some datasets.

## **DELHI TECHNOLOGICAL UNIVERSITY** | RESEARCH INTERN

May 17 - Jul 17 | New Delhi, India

- Classification of 20 activities could be achieved with record 94.22% accuracy for Human Activity Recognition for RBG-D video sequences.
- Developed a novel "Movement Polygon Mapping" technique of dimensionality reduction of 4D RGBD Video Sequences to a 1D vector.

### **PUBLICATIONS**

- R. Chandra, K. Jain, R. Deo, S. Cripps, "Langevin-gradient parallel tempering for Bayesian neural learning", in Neurocomputing Journal 2019
- R. Chandra, K. Jain, A. Kapoor, "Surrogate-assisted parallel tempering for Bayesian neural learning", in IEEE TNNLS (Under Review)
- D.K. Vishwakarma and K. Jain, "Human Activity Recognition using Movement Polygon in 3-D Posture Data", in IEEE Transactions on Human-Machine Systems (Under Review)

## POSITIONS OF RESPONSIBILITY

#### **IITG.AI** | Co-Founder

Apr 18 - Present | Guwahati, India

IITG.ai is the AI community of IIT Guwahati for nurturing talent among the students and to establish collaborative projects with experts all around the world.

## **CEPSTRUM** | GENERAL SECRETARY

July 19 - Present | Guwahati, India

CEPSTRUM is the student body of the Department of EEE, IITG. My duties include spearheading a 40 member team to perform various departmental activities.

## **CODING CLUB IITG** | Machine Learning Head

Apr 18 - Apr 19 | Guwahati, India

Supervision of the projects undertaken by the coding club of IITG in the fields of Machine Learning, Deep Learning and Artificial Intelligence.