# Atmadeep Banerjee

Pilani, Rajasthan, India atmadeepb@gmail.com | f20170101@pilani.bits-pilani.ac.in | +91-9903062669

# LINKS

#### Github:

https://github.com/Atom-101

#### LinkedIn:

www.linkedin.com/in/atmadeep-banerjee-a12539149

# **COURSEWORK**

- Computer Programming
- Object Oriented Programming
- Logic in Computer Science
- Data Structures and Algorithms
- Database Management Systems

### ONLINE COURSES

- Machine Learning (Prof. Andrew Ng's course audited through Coursera platform)
- Convolutional Neural Networks for Visual Recognition (CS 231n Stanford University, Spring 2017)
- Practical Reinforcement Learning (audited through Coursera)

# **SKILLS**

#### **PROGRAMMING**

Python • Java • C • C# • Prolog

# ML FRAMEWORKS AND LIBRARIES

Tensorflow • Keras • Numpy • Pandas • OpenCV • Scikit-Learn • Unity3D ML Agents

#### **SOFTWARES**

• Unity3D

# **ACCOMPLISHMENTS**

#### 2016

 Kishore Vaigyanik Protsahan Yojana (KVPY) Fellow

#### 2018

 Was among the top 14 teams across India to qualify for the final round of Philips Data Science Hackathon at Philips Innovation Campus, Bangalore, India

# **EDUCATION**

#### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI

B.E. IN COMPUTER SCIENCE (IN PROGRESS)

August 2017 - Present | Pilani, India

• Cum. GPA: 8.43 / 10

#### CALCUTTA BOYS' SCHOOL

March 2004 - April 2017 | Kolkata, India

• XII, Senior Secondary

Indian School Certificate (ISC) Examination 2017 | 95.75%

X, Secondary

Indian Certificate of Secondary Education (ICSE) Examination 2015 | 96.4%

#### **EXPERIENCE**

#### PIXXEL | AI TEAM CAMPUS LEAD

May 2018 - Present

- Pixxel is a startup using AI models to extract information from remote sensing data. Has students across 3 campuses of BITS Pilani. Working on building a constellation of nanosatellites over India.
- Worked with multispectral data for crop yield prediction.
- Worked on models for segmenting buildings and roads from multispectral and optical imagery.

Website: https://pixxel.co.in

#### TITANIC APP | Machine Learning Intern

May 2018 - June 2018

- Trained a ResNet-50 classifier written in Tensorflow using transfer learning, to detect offensive images.
- Wrote the prediction module to run inference on unseen images. Website: www.titanicapp.co

# RESEARCH EXPERIENCE

#### STUDY PROJECT | ROAD SIGN DETECTION USING A CNN

August 2018 - November 2018 | Advisor: Dr. Kamlesh Tiwari

- Worked on a project sponsored by MapMyIndia, for detecting and classifying various Indian road signs in their private dataset.
- Studied various region based and single-shot object detection algorithms.
- Trained a network based on YOLO v3 algorithm.

# **PROJECTS**

Sentiment Analysis using a Convolutional Neural Network

Stream tweets or news articles in real-time, depending upon search term given by user. Read streamed text corpuses using a CNN model and word2vec embeddings, and calculate mean sentiment on a scale of 0 to 1.

https://github.com/Atom-101/SentimentAnalysis

· Generating Pokemon images using a GAN

Scrape pokemon images from the internet through DuckDuckGo image search. Generate new Pokemon images using a Wasserstein GAN trained on the dataset.

https://github.com/Atom-101/PokeGAN