1207 G, University Terrace, Blacksburg VA 24060

# SAMPANNA KAHU

+1 (540) 491 1598 sampanna@vt.edu http://sampannakahu.github.io

### **EDUCATION**

Virginia Tech Aug 2018 to Present

<u>M.Eng. in Computer Engineering (1<sup>st</sup> semester GPA = 4.0/4.0)</u> - Important courses: Big Data Text Summarization, Computer Vision, Advanced Machine Learning, Security Analytics

**BITS Pilani 2011** to **2015** 

<u>B.E Honours in EEE (Electrical and Electronics Engineering)</u> (CGPA = 7.97/10) - Important courses: Data Mining, C Programming, Digital Image Processing, Engineering Mathematics, Digital Design, etc.

### **WORK EXPERIENCE**

## Flipkart Internet Pvt. Ltd.

July 2015 to July 2018

Software Development Engineer

- Built UGC (User Generated Content) service to serve product ratings and reviews at web-scale.
- Helped develop ML model to de-duplicate repetitive questions on products from users.
- Automated product review moderation through Deep Learning by building a multipurpose and extensible moderation service.
- Built capability to store and serve review images at web-scale.

### Flipkart Internet Pvt. Ltd.

June 2014 to Dec 2014

Software Development Intern

• ChatBot: Designed and implemented a Chat bot that chats with users through SMS and Google Hangouts to enable on-the-go product check and order tracking.

## Globallogic India Pvt. Ltd.

**Summer 2013** 

Software Development Intern

• Convert any surface into an touch-surface: Developed an app using Kinect's depth-sensing camera to track the major joints of a human body for detecting 3-D localized gestures.

#### SKILLS

- Relevant languages known: Java, Python, Bash, Matlab, HTML, CSS, Javascript, C/C++
- Familiar tools: Scikit-learn, Numpy, Pandas, Anaconda, React-js, PyTorch, etc.

### **PROJECTS**

- (Deep Learning) Text Classification using Convolutional Neural Networks: Trained an ML model to classify a sentence as a 'Question' or an 'Answer'.
- (Machine Learning Competition) RTO Fraud detection: Implemented an ML model to predict whether a placed order would be successfully delivered or not (Return To Origin).
- <u>(Image Processing Research Project)</u> Fluoroscopy based sparse reconstruction of coronary venous anatomy with application to cardiac resynchronisation therapy: (2014) Developed methods to effectively reconstruct 3-dimensional model of cardiac venous anatomy from X-ray images of human heart.
- <u>(Image Processing Project)</u> Detection of Diabetic Retinopathy from retinal images: (with Prof. Rao, BITS Pilani): Developed various image processing techniques to automatically measure the severity of Diabetic Retinopathy from retinal images.
- <u>(Image Processing + Optics Project)</u> Parallax Error Lens: (Showcased in BITSAA Global Meet '14) Parallax Error Lens can convert any ordinary surface into a touch-surface using stereoscopic vision principles.

#### ADDITIONAL EXPERIENCE AND AWARDS

- Secretary and founding member of Automation and Robotics Club (ARC) at BITS Pilani.
- 1st prize in Computer Vision and Robotics competition: Position 1st in Machinist (Real-time video processing and robotics competition) BITS Pilani National Technical Festival (ATMOS '13)
- 1st prize in Robotics competition: Position 1st in Maze Solver Competition at BITS Pilani National Technical festival (ATMOS '12).
- 3rd prize in Robotics competition: Position 3rd in the zonal of International Robotics Challenge Gridmasters Competition at IIT BOMBAY Techfest.
- **Robotics Club Secretary:** Secretary and founding member of the Automation and Robotics Club (ARC) at BITS Pilani.
- Robotics Mentor (2013 2014): (Student Mentorship Program at BPHC): Mentored students junior to me in robotics to help them get familiar with related concepts and helped them participate in competitions.