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SAMPANNA KAHU

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EDUCATION

BITS Pilani, India   **Aug 2011** to **June 2015**

- **B.E (Hons.) in EEE (Electrical and Electronics Engineering)**
  CGPA: 8 (on a scale of 10)
  Important courses: Digital Signal Processing, Digital Image Processing, Computer Architecture, Control Systems, Analog & Digital VLSI Design, Power Electronics, Electrical Machines, iPodia, et al.

ACADEMIC PROJECTS

- (Image Processing Research Project) **Fluoroscopy based sparse reconstruction of coronary venous anatomy with application to cardiac resynchronisation therapy: (with Dr. P. G. Menon, Adjunct Professor, Carnegie Mellon University, USA)** (2014) Developed methods to effectively reconstruct 3-dimensional cardiac venous model using point clouds generated using the fluoroscopic projections (DICOM fluoroscopy images) of human heart.
- (Image Processing Project) **Detection of Diabetic Retinopathy from retinal images: (with Dr. K. M. M. Rao, Professor, BITS Pilani, India)** Developed various image processing techniques to develop an algorithm for automatically detecting and measuring the severity of Diabetic Retinopathy from high resolution retinal (fundus) images.
- (Image Processing + Optics Project) **Parallax Error Lens:** (Selected for showcase in BITSAA Global Meet '14, Podium finish (twice) in Innovation Contest organised by Centre for Innovation, Incubation and Entrepreneurship (CIIE) at BITS Hyderabad).
  Parallax Error Lens can convert any ordinary surface into a touch-surface using stereoscopic vision principles. It is a specially designed lens which can be attached to a camera to give it depth sensing capabilities.
- (Robotics Project) **Robotic arm:** (2015). A 2-DOF planar manipulator arm that uses two servo motors to mirror cursor movements.
- (Android Application) **Automatic Wallpaper changer:** An Android app to download images using Bing's API and change the wallpaper.

WORK EXPERIENCE

Flipkart Internet Pvt. Ltd.   **July 2015** to **Present**

Software Development Engineer
- Contributed to SCF (Static Content Framework) which complements Flipkart's catalog by handling all the catalog images. Helped enrich the catalog by building the qualifier-to-value-mapping functionality.
- Product reviews & ratings (UGC): Built UGC service to serve web-scale traffic to Flipkart's consumer applications. Currently working on automating review text moderation.

Flipkart Internet Pvt. Ltd.   **June 2014** to **Dec 2014**

Software Dev. Intern (PS2)
- ChatBot: Designed and implemented Butler; a Chat bot that chats with Flipkart customers through SMS and Google Hangouts to enable on-the-go product check and order tracking. This Chat bot responds to a basic set of commands by accepting queries from users and is capable of maintaining chat context and chat history in database.

Globallogic India Pvt. Ltd.   **Summer 2013**

Software Dev. Intern (PS1)
- Kinect gesture recognition app: With the help of Kinect's depth sensing abilities, a windows app was developed to track the major joints of a human body in the view of the 3-D camera (i.e. Kinect) to detect gestures and eventually simulate the functional requirements of a mouse. This was further extended to convert any ordinary surface into a touch-sensing surface.

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.
- **iPodia Global Innovation Conference at Beijing, China** (May 2015) (**www.ipodia.usc.edu**): Attended the iPodia innovation meet-up organised by University of Southern California across 5 nations to open up new innovation opportunities by leveraging cultural diversities.
- **Phoenix Office bearer (2013 - 2014):** Was a core member in the student committee of the EEE and ECE technical association at BITS Hyderabad. Helped organise various technical activities and competitions.
- **Music:** Trained 5 years on Tabla (an Indian classical percussion instrument) and passed 4 certification exams of All India Gandharva Mahavidyalaya.