

JISHNU DEY

jdey2@illinois.edu | (217) 721-9031 | jishnu-d.github.io
509 Bash Ct., Champaign, IL 61820

EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

MS IN COMPUTER SCIENCE

Expected: May 2020 | Urbana-Champaign, IL

GPA: 4.00

Coursework: Deep Learning • Advanced Information Retrieval

Research Areas: Neural Machine Translation • Sequence Modeling • Natural Language Processing • Deep Learning
– Developing new attention mechanisms for machine translation and sequence labeling tasks
– Implemented a neural caption generator based on “Show and Tell” paper by Vinyals et al

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

B.TECH IN ELECTRONICS AND ELECTRICAL COMMUNICATION ENGINEERING

May 2016 | Kharagpur, India

GPA: 9.36 / 10.00

Coursework: Machine Learning • Operating Systems • Algorithms • Programming and Data Structures • Digital Signal Processing • Image Processing • Convex Optimization • Probability and Statistics

Thesis: Distributed Deployment of Wireless Sensor Networks

EXPERIENCE

SAMSUNG

SOFTWARE ENGINEER (RESEARCH)

Jun 2016 - Jul 2018 | Bangalore, India

- InstaBP - Android App for Blood Pressure Measurement
 - Signal processing and neural network modeling in Python using NumPy & TensorFlow
 - Developed and published Android App on Google Play Store
- Sleep-Awake Classifier - Multimodal sensor data processing and classification using SVMs
- Food-type Classifier - Transfer learning of ImageNet models on Samsung's in-house dataset of Indian foods

SUMMER INTERN

May 2015 - Jul 2015 | Bangalore, India

- Developed adaptive filters to reduce noise in Samsung Gear's PPG sensors
- Prototyped in MATLAB and developed C++ backend

SKILLS

General Purpose Programming: Python • C++ • MATLAB • Java • C • R

DL, ML & NLP Toolkits: PyTorch • TensorFlow • Keras • NLTK • OpenNMT-py • PySpark • scikit-learn • Pandas

Miscellaneous: Android • HTML5 • Git • \LaTeX

PUBLICATIONS

- [1] J. Dey, A. Gaurav, and V. N. Tiwari. InstaBP: Cuff Less Blood Pressure Monitoring on Smartphone Using Single PPG Sensor. In *2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 2018.
- [2] J. Dey, T. Bhowmik, S. Sahoo, and V. N. Tiwari. Wearable PPG Sensor based Alertness Scoring System. In *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 2017.
- [3] T. Bhowmik, J. Dey, and V. N. Tiwari. A Novel Method for Accurate Estimation of HRV from Smartwatch PPG Signals. In *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 2017.

OTHER RESPONSIBILITIES

TEACHING ASSISTANT | CS 125 @ UIUC

Aug 2018 - Present

- Taught Java and Android programming to undergraduate students through laboratory and discussion sessions

ACHIEVEMENTS

- NASSCOM AI Game Changer Award awarded to InstaBP
 - Samsung Citizen Award for Technology Excellence in Innovator Category
 - Gold Medalist in University level Math Olympiad at IIT Kharagpur
 - All India Rank 534 (top 0.09% among 0.6 million candidates) in IIT-JEE
- Team Award | 2018
Individual Award | 2017
Team Award | 2013
Individual Award | 2012