BHANU TEJA GULLAPALLI

bgullapalli@cs.umass.edu ⋄ *LinkedIn* ⋄ *Webpage*[1]

EDUCATION

University of Massachusetts, Amherst   Sept '18 - Present
PhD in Computer Science (advised by *Prof. Tauhidur Rahman*)
University of Massachusetts, Amherst   Feb '17 - Sept '18
MS in Computer Science   CGPA-3.95/4.0
Indian Institute of Technology, Guwahati   July '11 - May '15
Bachelor of Technology in Computer Science   CGPA-7.81/10.0

RESEARCH INTERESTS

- Wearable Health Sensing
- Machine Learning
- Mobile Health Systems

PAPERS

- On-body Sensing of Cocaine Craving, Euphoria and Drug-Seeking Behavior Using Cardiac and Respiratory Signals
  Gullapalli, B.T., *Natarajan, A., Angarita, G.A., Malison, R.T., Ganesan, D. and Rahman, T*
  UBICOMP 2019

- A new hierarchical clustering algorithm to identify non-overlapping like-minded communities
  Deepak, T.S., Adhya, H., Kejriwal, S., **Gullapalli, B.** *and Shannigrahi, S.,*
  HT 16

INDUSTRY EXPERIENCE

Samsung R&D Institute, Bangalore, India   Jul '15 - Dec '16
Worked in the Video Editor team of Samsung Camera. Primarily worked on Samsungs Video Editor (Pro/Lite), highlight player, Slow Motion. Developed and implemented theme mode in Video Editor Pro which assists the user in creating stories on Samsung Galaxy S8.   Bangalore, India

Samsung R&D Institute, Bangalore, India   May '14 - Aug '14
Developed a simulation of OLSR (Optimized Link State Routing) Protocol for Tizen OS. Added APIs which extended the functionalities from the Android.   Bangalore, India

KEY RESEARCH PROJECTS

Opioid administration using wearable biosensors   Jul '19 - Present
Detecting opioid administration using physiological signals obtained from smartwatch of the subjects admitted to the emergency department using a Temporal convolution network (TCN) based architecture.

Sensing Cocaine Craving, Euphoria and Drug-Seeking Behavior Using Cardiac and Respiratory Signals   Apr '18 - Feb '19
Built a system that can understand and predict key variables of the addiction loop using ECG and the respiratory signal obtained from a wearable chest band.

---

[1]Use URL bhanutejagullapalli.github.io in case hyperlinks don't work

Drug Target prediction using Deep Representation Learning   Jan '18 - Apr '18

Using graph convolution and attention mechanism, built an interpretable system which can identify proteins affected by a drug.

Tree-Structured Detector Cascade   May '17 - Aug '17

Developed a novel way to grow and find the optimal configuration of a tree-structured cascade and applied it to smoking detection.

COURSEWORK

Key Courses: Advanced Natural Language Processing, Advanced Machine Learning, Machine Learning, Machine Learning Theory, Probabilistic Graphical Models, Artificial Intelligence, Machine Learning Theory, Advanced Algorithms, Advanced Information Assurance, Research Methods in Empirical Computer Science

TECHNOLOGY & SKILLS

Languages: Python, Java, Android, C/C++, HTML
Tools & Frameworks: Deep learning with Pytorch, Python Machine learning stack (Numpy/scipy, Scikit-Learn, Statsmodels), Git, LaTeX

ACHIEVEMENTS

- Received Spot Award in Samsung R&D Institute Bangalore for providing good solutions and coding skills
- Won the first prize at Samsung R&D Institute Bangalore tech-fair for developing a location-based filter for Samsung video editor.
- Listed among top 0.3% students of 0.5 million appearing in Joint Entrance Exam, IIT-JEE 2011
- Secured 961 rank in All India Engineering Entrance Exam (AIEEE) 2011 taken by 1.2 million people.