

BHANU TEJA GULLAPALLI

bgullapalli@cs.umass.edu \diamond [LinkedIn](#) \diamond [Webpage](#)¹

EDUCATION

University of Massachusetts, Amherst	Sept '18 - Present
<i>PhD</i> in Computer Science (advised by Prof. Tauhidur Rahman)	
University of Massachusetts, Amherst	Feb '17 - Sept '18
<i>MS</i> in Computer Science	CGPA-3.95/4.0
Indian Institute of Technology, Guwahati	July '11 - May '15
<i>Bachelor of Technology</i> 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
<i>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.</i>	Bangalore, India
Samsung R&D Institute, Bangalore, India	May '14 - Aug '14
<i>Developed a simulation of OLSR (Optimized Link State Routing) Protocol for Tizen OS. Added APIs which extended the functionalities from the Android.</i>	Bangalore, India

KEY RESEARCH PROJECTS

Opioid administration using wearable biosensors	Jul '19 - Present
<i>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.</i>	
Sensing Cocaine Craving, Euphoria and Drug-Seeking Behavior Using Cardiac and Respiratory Signals	Apr '18 - Feb '19
<i>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.</i>	

¹Use 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 tested 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, L^AT_EX

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.