Ganga Meghanath

linkedin.com/in/gangamegha/ | https://gangamegha.github.io/

Education

Purdue University (GPA 4.0/4.0) — **Jan. 2021 – Dec 2022**
MS, School of Electrical and Computer Engineering — *West Lafayette, IN*

IIT Madras (CGPA 8.79/10.0) — **Aug. 2015 – May 2019**
B.Tech Electrical Engineering, Minor in Data Science — *Chennai, India*

Work Experience

Data Scientist - Windows Experimentation — **Microsoft**
Feb. 2023 – Present | Causal Analysis, A/B Testing, Machine Learning, Policy Compliance — *Redmond, WA*

- Identified drivers of OneDrive usage & Tailored SCOOBE click-through-rate using Causal Discovery
- Led the DMA (Digital Markets Act) policy compliance strategy for Windows Experimentation Platform
- Conducted use behaviour analysis on Setting pages & generated label stream for Settings Recommendation

Data Scientist Intern - Windows — **Microsoft**
May. 2022 – Aug. 2022 | Machine Learning, Data Wrangling, Ranking — *Redmond, WA*

- Built a working prototype for Windows 11 Settings recommendation using inferred user intent

Graduate Research Assistant — **Purdue University**
May. 2021 – Dec. 2022 | Computational Neuroscience, Natural Language Processing — *West Lafayette, IN*

- Modeled neural population dynamics in Macaque cortex -inferred activity of both observed & unobserved neurons
- Decoded speech text from human neural recordings - Electrocorticography (ECoG) data with 3% word error rate

Data & Applied Scientist - Bing Ads — **Microsoft**
Jun. 2019 – Dec. 2020 | Computer Vision, NLP, Data Mining, Anomaly Detection, SQL — *Bangalore, India*

- Built a domain addition model for detecting Account Compromise with precision & recall of 32% and 80%
- Developed effective data-mining pipelines for sampling & labeling data that constitutes ~1 in 10^6 of the total ads
- Shipped models trained on in-house data (MobileNet, EfficientNet, BERT) for detecting editorial policy violations

Research Intern — **Purdue University**
May. 2018 – Jul. 2018 | Computer Vision, Image Processing — *West Lafayette, IN*

- Trained ApproxNet - a ResNet-34 model with 6 output ports to control inference time v/s accuracy trade-offs

Machine Learning Intern — **PhotoGurus**
May. 2017 – Jul. 2017 | Image Processing, Data Analysis — *Kochi, India*

- Processed ~3 lakh images through Rekognition & EyeEm vision API & analyzed the stored results on MongoDB

Publications

[1] Ganga Meghanath, Bryan Jimenez, and Joseph G Makin. "Inferring population dynamics in macaque cortex". In: *Journal of Neural Engineering* 20.5 (2023), p. 056041.

[2] Ran Xu et al. "ApproxNet: Content and contention-aware video object classification system for embedded clients". In: *ACM Transactions on Sensor Networks (TOSN)* 18.1 (2021), pp. 1–27.

Technical Skills

Languages: Python, C/C#/C++, MySQL, TensorFlow, Pytorch, MATLAB, ROS

Leadership

Data Science Talk Series | *Microsoft* — Dec. 2023 – Present
Graduate Teaching Assistant | *Purdue University* — Jan. 2021 – May. 2021
Garage Hackathon 2020/2023 | *Microsoft* — Jul. 2020 & Sep. 2023
Elected Class Representative | *B.Tech EE, IIT Madras* — Aug. 2016 – Jul. 2017
National Service Scheme, India | *IIT Madras* — Aug. 2015 – Jul. 2016

*All other projects and related reports can be found at https://gangamegha.github.io/