Abhijith Mundanad Narayanan

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Education

PhD: Electrical Engineering — KU Leuven, Belgium
ML and AI: regression, feature-based and DNNs in (biomedical) signal processing. — *Dec. 2016 – Sep. 2021*

Master of Engineering in Signal Processing — Indian Institute of Science, Bengaluru
Specialization in audio data processing, speech data processing and classification. — *Aug. 2012 – Jul. 2014*

B.Tech in Electronics and Communication Engineering — University of Kerala
Specialization in electronics and communication. — *Aug. 2005 – Jul. 2009*

Experience

Data Scientist — Feb, 2023 – Present (2+ yrs)
Toqua | Decarbonizing the shipping industry through AI and machine learning. — *Gent, Belgium*

- Ownership of ship-kernels: from data ingestion, exploration, modeling, validation to deployment of ship performance models.
- Developing and maintaining data ingestion pipelines from various data collection APIs.
- Data quality monitoring of ship sensor data

Data Scientist — Oct, 21 – Dec, 22 (1 yr)
Indigo Diabetes | World's first implantable Continuous Metabolite Measurement (CMM) sensor. — *Gent, Belgium*

- End-to-end: Sensor data to glucose models.
- Making sense of sensor data

Doctoral Researcher — Oct, 17 – Sep, 21 (4 yrs)
KU Leuven | Biomedical data processing research group in the world's most innovative university — *Leuven, Belgium*

- Developed data processing, analysis and machine learning techniques on biomedical data, with a specific focus on electroencephalography (EEG) data.

Signal Processing Engineer — Jul. '14 – Sep. '16 (2 yrs)
Qualcomm | World's largest fabless semiconductor company. — *Bengaluru, India*

- Software development of residential gateways through upgrading in echo canceller system.
- Contributed towards the development of world's first Gigabit DSL chip of Qualcomm.

Projects

Toqua | *Python, Microsoft Azure* — Feb '23 – Present

- Laid the foundations of a data health monitoring framework for ship sensor data
- Full ownership of client projects: from data ingestion via API connections to model validation and updates.
- Interacting with customers, understanding their needs and showcasing the value of Toqua's ship performance models.

Indigo Biomed | *Python, Dash/Plotly, Matplotlib* — Oct, 21 – Dec, 22

- Built end-to-end data pipelines from raw sensor data to glucose prediction models for Indigo's first CMM sensor.
- Used mathematical models and interactive visualizations to investigate and demonstrate fundamental features, patterns, and issues in collected sensor data.

Technical Skills

Languages: Python, MATLAB
Frameworks/Tools: Azure ML, MLflow, Bokeh, Dash (Plotly)
Developer Tools: Git, Docker, Bash/linux, Microsoft Azure