Dr. Gopi Battineni, Research Assistant

Email: gopi.battineni@unicam.it

Education

2018 - 2021: Ph.D., One Health, University of Camerino, Camerino, Italy (Maximum mark)

Vote: Maximum mark

Dissertation title: Comprehensive Machine Learning Algorithms to evaluate the older adult dementia progression

Research topics covered: Machine Learning in the diagnosis of chronic diseases, Telemedicine, Text Mining of medical documents, Health data Mining, Health website development, ICT, Technologies, R statistics, Numpy, Pandas, Big data, and Predictive modeling.

2016 - 2017: International Master in Enterprise Engineering, University of Bordeaux, France

Vote: A+

Dissertation title: Case study analysis on the role of process mining in education

Major: Data Mining, MRP II, GRAI, Enterprise Modeling, and Industrial Engineering

2014 - 2016: Master in Enterprise System Professional, Sheffield Hallam University, UK

Vote: A

Dissertation title: Opportunities of Indian companies to implement ERP systems (Case Study: TATA manufacturing)

Major: Data Mining, MRP II, GRAI, Enterprise Modeling, and Industrial Engineering

2008 - 2012: Bachelor of Technology in Electronics and Communication Engineering, JNTU, India

Vote: First class with distinction

Dissertation title: Recognition of Vehicle Number Plate Using MATLAB

Major: Java, C, C++, Databases, Antennas and MatLab

Experience

Research

1. 2018 - 2021: Research fellowship from the Italian Ministry of Economic Development (MISE) with Grant reference No

Project Title: Development of Machine Learning Models with motivation to early-stage identification of dementia in older adults

2. **2019:** Received ERASMUS plus a scholarship to conduct research at the University of International Business, Almaty, Kazakhstan with agreement number 2018-1-IT02-KA107-047381

Project Title: Finding disease patterns and Trends using ML concepts from local hospital datasets

3. 2021 - Ongoing: Research Assistant (Assegno di ricerca SSD BIO/16) fellowship, University of Camerino, Italy.

Project Title: Marche Biobanking in the field of personalized medicine, focusing on drugs, diagnostics, and new therapeutic approaches. Roles and responsibilities:

- Managing vast amounts of data linked to these samples includes patient demographics, medical histories, genetic information, and treatment outcomes.
- Collaborating with healthcare providers, research institutions, pharmaceutical companies, and regulatory bodies
- Providing access to well-characterized, diverse samples and associated data supports the development of new drugs, diagnostic
 tools, and therapeutic approaches.
- The development of ML models that can predict how patients might respond to specific treatments based on their genetic
 makeup, medical history, and other factors. This aids in personalized treatment plans, allowing healthcare providers to tailor
 therapies for individual patients.
- Giving support in selecting relevant features from complex datasets, and determining which factors are most crucial in predicting disease risks or treatment outcomes.

 Facilitates the implementation of precision medicine by enabling the identification of patient subgroups with similar characteristics or disease profiles.

Teaching

2012: Teaching assistant in an engineering educational institution in India

2019-2022: Course coordinator 'Telemedicine and Digital Health', Masters degree, University of Camerino, Italy.

2022-Ongoing: Adjunct professor 'Realtime applications of ML modeling', VR Siddarth Engineering College, India

Professional

2017 - Internship in process modeling Engineer, University of Delle Marche, Italy.

Roles and responsibilities: We worked to specify why process mining helps to improve organizational efficiency and indicate performance indicators on case studies determined by my supervisor. It is in particular to integrate our respective approaches, my work mainly Experimental coding activities. It means, getting some data describing sequences of operations like a typical event log generated by some information system, pre-processing them, and using algorithms to extract paths that represent the general process executed by people, information about time, duration, and other insights. More or less it mainly concentrated on the generated process model and found out where data was deviating from the model by tools Prom Lite or Disco.

2013-2014 - Database Engineering

My job is focused on designing and building data pipelines and infrastructure. Mostly work with MySQL to create systems that extract, transform, and load (ETL) data from various sources into databases. Besides, dealing with management and maintaining databases, including tasks such as installation, configuration, ensuring security, monitoring performance, and troubleshooting issues in MySQL databases.

Programming and digital skills

Python: Numpy (advanced), Pandas (advanced), SciKit Learn (advanced), Pytorch (medium), Keras (advanced), Tensor Flow (medium) R: Statistics (Advanced), multivariate analysis (Basic)

MatLab: Basic

MySql: Expert

Power BI: Professional

Microsoft Office | Kanva | Paint Shop Pro | Teamviewer | several email packages | Website developer

Tools: ProM, Disco, Rapid Miner, Weka

Organizational and interpersonal skills

- Have led several seminars for undergraduates in computer science
- department.
- Worked as project lead at degree level
- Activate student participation award at college education
- Chaired International Conferences and delivered invited talks
- Project Management Using Agile
- Business Process Mining
- Knowledge of research methodologies
- Excellent knowledge of writing and presenting reports

Major achievements

- 1. Recognized as one of the top 2% of scientists in the world for the two consecutive years of 2021 and 2022.
- 2. Best PhD thesis award in eHealth and Telemedicine
- 3. Awarded as best student coordinator

4. Two published works of mine were selected as cover stories in Infectious Diseases Journal and Technologies journals

Languages

Mother tongue(s): Telugu , Hindi

English

Listening C2 reading C2 writing C1 Spoken production C2 spoken interaction C1

French

Listening A2 reading A1 writing A1
Spoken production A1 spoken interaction A1

Italian

Listening A2 reading A1 writing B1 Spoken production A2 spoken interaction A2

Funding and grant writing

- 1. **2018:** Principal investigator in the development of a marine doctor project based on telemedical knowledge funded by ITF Trust (UK) and International Radio Medical Centre (Italy)
- 2. **2020:** Co-writer for the project enabling consumers to become Prosumer in the Energy Transition Era (ECPE)
- 3. **2021:** Principal investigator in Marche BioBank funded by European Union POR MARCHE FESR 2014/2020 (Salary paid for 24 Months).
- 4. **2022:** Principal investigator in OSPIEMARE (Medical observatory for seafarers) funded by the Italian Health Ministry by grant No. J59J21011210001
- 5. **2023:** UNICAM post-doctoral fellowship on "AI and ML modeling for diagnosis of neurogenerative disorders" for two years (Salary paid for 24 Months)

Developed websites

[1]. https://www.marinedoctor.net/

Technologies: HTML, PHP, WordPress

Plugins: Elementor

[2]. https://www.ospiemare.it/

Technologies: HTML, PHP, Python Streamlit, WordPress

Plugins: Elementor

[3]. https://www.euricam.com/

Technologies: HTML, PHP, WordPress

Plugins: Elementor

Projects handled

A. 2018-21: Development of a telemedical assistance system called Marine Doctor for seafarers

The purpose of "MARINE DOCTOR" is to simplify the medical assistance of seafarers. The developed software is friendly simple, fast, and compatible with any computer. It deals with the collection of patient information, diagnosis details, etc. The main function of the system is to register and store seafarers' and doctors' details and guide the user to send a medical request with a simple form of a questionnaire. We can also retrieve these details as and when required, and manipulate these details meaningfully system input contains patient details, and diagnosis details, while system output is to get these details onto the screen.

B. 2020-2022: Enabling Consumers to become Prosumer in the Energy transition Era (ECPE)

The purpose of the project is to coordinate the various norms, collecting and promoting best practices in the interpretation and application of the various forms. The project will analyse the prosumer's behaviours from multiple perspectives (for this reason is very important the choose a multidisciplinary approach from all partners). The ECPE project will enhance the use of collaborative behavior in the energy consumption and production market.

C. 2022-Ongoing: Development of seafarer's health observatory (OSPIEMARE)

The Epidemiological Observatory on Seafaring People's Pathologies is useful for collecting, analyzing, interpreting, and disseminating reliable and quality information on the health of the population and on the provision of health services. This project aims to develop a data observatory of seafarers to improve health status by monitoring communicable and non-communicable diseases of seafarers by monitoring their health and disease trends, creating a standard tool (questionnaires), and conducting a risk assessment.

H Index

Google Scholar: 25 (https://scholar.google.com/citations?hl=en&user=oJkhnrcAAAAJ)

Scopus: 20 (https://www.scopus.com/authid/detail.uri?authorId=57209566116&origin=AuthorEval)

WoS: 16 (https://www.webofscience.com/wos/author/record/2089498)

Publications

Publications in JCR-indexed Journals (* represents the corresponding author)

2019

- 1. **Battineni** G*, Chintalapudi N, Amenta F. Machine learning in medicine: Performance calculation of dementia prediction by support vector machines (SVM). Informatics Med Unlocked. 2019;16.
- 2. **Battineni** G*, Canio MD, Chintalapudi N, Amenta F, Nittari G. Development of physical training smartphone application to maintain fitness levels in seafarers. Int Marit Health. 2019;70(3):180–6.
- 3. Nittari G, Pallotta G, Battineni G, Ioannidis N, Tayebati SK, Amenta F, et al. Comparative analysis of the medicinal compounds of the ship's "medicine chests" in European Union maritime countries. Need for improvement and harmonization. Int Marit Health. 2019;70(3):143–50.
- 4. Nittari G, Arcese A, **Battineni G**, Khuman K, Pallotta G, Saturnino A, et al. Design and evolution of the Seafarer's Health Passport for supporting (tele)-medical assistance to seafarers. Int Marit Health. 2019;70(3):151–7.
- 5. **Battineni** G*, Sagaro GG, Nalini C, Amenta F, Tayebati SK. Comparative machine-learning approach: A follow-up study on type 2 diabetes predictions by cross-validation methods. Machines. 2019;7(4).
- 6. **Battineni** G*, Chintalapudi N, Amenta F, Tayebati SK. Report on market analysis and preventions need to provide medications for rural patients of Italy using ICT technologies. Int J Innov Technol Explor Eng. 2019;9(1):5286–9.
- 7. Mirmoeini SM, Shooshtari SSM, Battineni G, Amenta F, Tayebati SK. Policies and challenges on the distribution of specialists and subspecialists in rural areas of Iran. Med. 2019;55(12).

2020

- 1. **Battineni** G*, Sagaro GG, Chinatalapudi N, Amenta F. Applications of machine learning predictive models in the chronic disease diagnosis. J Pers Med. 2020;10(2).
- 2. Battineni G*, Amenta F. Designing of an Expert system for the management of Seafarer's health. Digit Heal. 2020;6.
- 3. **Battineni** G*, Chintalapudi N, Amenta F. Performance analysis of different machine learning algorithms in breast cancer predictions. EAI Endorsed Trans Pervasive Heal Technol. 2020;6(23):1–7.
- 4. Mirmoeini SM, Shooshtari SSM, **Battineni G**, Amenta F, Tayebati SK. Telepediatric assistance in Iran: Specialist and subspecialty challenges. EAI Endorsed Trans Pervasive Heal Technol. 2020;6(23):1–8.
- 5. Sagaro GG, Battineni G, Chintalapudi N, Canio MD, Amenta F. Telemedical assistance at sea in the time of COVID-19 pandemic.

- Int Marit Health. 2020;71(4):229-36.
- 6. **Battineni** G*, Baldoni S, Chintalapudi N, Sagaro GG, Pallotta G, Nittari G, et al. Factors affecting the quality and reliability of online health information. Digit Heal. 2020;6.
- 7. **Battineni** G*, Sagaro GG, Chintalapudi N, Amenta F. Conceptual Framework and Designing for a Seafarers' Health Observatory (SHO) Based on the Centro Internazionale Radio Medico (C.I.R.M.) Data Repository. Sci World J. 2020;2020.
- 8. Chintalapudi N, **Battineni G**, Sagaro GG, Amenta F. COVID-19 outbreak reproduction number estimations and forecasting in Marche, Italy. Int J Infect Dis. 2020;96:327–33.
- 9. Nittari G, Khuman R, Baldoni S, Pallotta G, **Battineni G**, Sirignano A, et al. Telemedicine Practice: Review of the Current Ethical and Legal Challenges. Telemed e-Health. 2020;26(12):1427–37.
- 10. Battineni G*, Chintalapudi N, Amenta F. Ai chatbot design during an epidemic like the novel coronavirus. Healthc. 2020;8(2).
- 11. Chintalapudi N, **Battineni G**, Amenta F. COVID-19 virus outbreak forecasting of registered and recovered cases after sixty day lockdown in Italy: A data driven model approach. J Microbiol Immunol Infect. 2020;53(3):396–403.
- 12. **Battineni** G, Chintalapudi N, Amenta F, Traini E. A comprehensive machine-learning model applied to magnetic resonance imaging (MRI) to predict Alzheimer's disease (ad) in older subjects. J Clin Med. 2020;9(7):1–14.
- 13. Sagaro GG, **Battineni G**, Amenta F. Barriers to Sustainable Telemedicine Implementation in Ethiopia: A Systematic Review. Telemed Reports. 2020;1(1):8–15.
- 14. Battineni G*, Chintalapudi N, Amenta F. SARS-CoV-2 epidemic calculation in Italy by SEIR compartmental models. Appl Comput Informatics. 2020 Oct 26;ahead-of-p(ahead-of-print).
- 15. **Battineni G***, Chintalapudi N, Amenta F. Forecasting of COVID-19 epidemic size in four high hitting nations (USA, Brazil, India and Russia) by Fb-Prophet machine learning model. Appl Comput Informatics. 2020;

2021

- 1. **Battineni** G*, Pallotta G, Nittari G, Chintalapudi N, Varlaro V, Amenta F. Development of quality assessment tool for websites of the international aesthetic medicine societies. Informatics Med Unlocked. 2021;23.
- 2. Sagaro GG, Dicanio M, **Battineni G**, Samad MA, Amenta F. Incidence of occupational injuries and diseases among seafarers: A descriptive epidemiological study based on contacts from onboard ships to the Italian Telemedical Maritime Assistance Service in Rome, Italy. BMJ Open. 2021;11(3).
- 3. **Battineni** G*, Sagaro GG, Chintalapudi N, Di Canio M, Amenta F. Assessment of awareness and knowledge on Novel Coronavirus (COVID-19) pandemic among seafarers. Healthc. 2021;9(2).
- 4. Chhetri B, Goyal LM, Mittal M, Battineni G*. Estimating the prevalence of stress among Indian students during the COVID-19 pandemic: A cross-sectional study from India. J Taibah Univ Med Sci. 2021;16(2):260–7.
- 5. Nittari G, Battineni G, Messinetti M, Campanozzi L, Sirignano A. Critical reflections and solutions for health problems of Italian refugees. Clin Ter. 2021;172(2):158–62.
- 6. Sagaro GG, **Battineni G**, Camo MD, Minciacchi A, Nittari G, Amenta F. A descriptive epidemiological study of cardiovascular diseases among seafarers. Int Marit Health. 2021;72(4):252–8.
- 7. Chintalapudi N, **Battineni G**, Amenta F. Sentimental analysis of COVID-19 tweets using deep learning models. Infect Dis Rep. 2021;13(2).
- 8. Kansal AK, Gautam J, Chintalapudi N, Jain S, **Battineni G***. Google trend analysis and paradigm shift of online education platforms during the COVID-19 pandemic. Infect Dis Rep. 2021;13(2):418–28.
- 9. Aggarwal A, Mittal M, **Battineni G***. Generative adversarial network: An overview of theory and applications. Int J Inf Manag Data Insights. 2021;1(1).
- 10. **Battineni** G*, Sagaro GG, Chintalapudi N, Amenta F, Tomassoni D, Tayebati SK. Impact of obesity-induced inflammation on cardiovascular diseases (Cvd). Int J Mol Sci. 2021;22(9).
- 11. Chakraborty T, Jamal RF, **Battineni G**, Teja KV, Marto CM, Spagnuolo G. A review of prolonged post-covid-19 symptoms and their implications on dental management. Int J Environ Res Public Health. 2021;18(10).
- 12. Chintalapudi N, **Battineni G**, Canio MD, Sagaro GG, Amenta F. Text mining with sentiment analysis on seafarers' medical documents. Int J Inf Manag Data Insights. 2021;1(1).
- 13. Chintalapudi N, **Battineni G**, Amenta F. Second wave of COVID-19 in Italy: Preliminary estimation of reproduction number and cumulative case projections. Results Phys. 2021;28.
- 14. **Battineni** G*, Hossain MA, Chintalapudi N, Traini E, Dhulipalla VR, Ramasamy M, et al. Improved alzheimer's disease detection by MRI using multimodal machine learning algorithms. Diagnostics. 2021;11(11).

- 15. Badr C, Spagnuolo G, Amenta F, Khairallah C, Mahdi SS, Daher E, et al. A two-year comparative evaluation of clinical performance of a nanohybrid composite resin to a flowable composite resin. J Funct Biomater. 2021;12(3).
- 16. **Battineni G***, Sagaro GG, Chintalapudi N, Amenta F. The benefits of telemedicine in personalized prevention of cardiovascular diseases (CVD): A systematic review. J Pers Med. 2021;11(7).
- 17. Carotenuto A, Traini E, Fasanaro AM, **Battineni G**, Amenta F. Tele-neuropsychological assessment of Alzheimer's disease. J Pers Med. 2021;11(8).
- 18. Sagaro GG, **Battineni G**, Di Canio M, Amenta F. Self-reported modifiable risk factors of cardiovascular disease among seafarers: A cross-sectional study of prevalence and clustering. J Pers Med. 2021;11(6).
- 19. Mittal M, **Battineni** G*, Singh D, Nagarwal T, Yadav P. Web-based chatbot for Frequently Asked Queries (FAQ) in Hospitals. J Taibah Univ Med Sci. 2021;16(5):740–6.
- 20. Savva D, **Battineni** G, Amenta F, Nittari G. Hypersensitivity reaction to hyaluronic acid dermal filler after the Pfizer vaccination against SARS-CoV-2. Int J Infect Dis. 2021;113:233–5.

2022

- 1. Naim S, Spagnuolo G, Osman E, Mahdi SS, **Battineni G**, Qasim SSB, et al. Quantitative Measurements of the Depth of Enamel Demineralization before and after Bleach: An In Vitro Study. Biomed Res Int. 2022;2022.
- 2. Khandelwal A, Janani K, Teja K, Jose J, **Battineni G**, Riccitiello F, et al. Periapical Healing following Root Canal Treatment Using Different Endodontic Sealers: A Systematic Review. Biomed Res Int. 2022;2022.
- 3. Mahdi SS, Allana R, **Battineni** G*, Khalid T, Agha D, Khawaja M, et al. The promise of telemedicine in Pakistan: A systematic review. Heal Sci Reports. 2022;5(1).
- 4. Teja KV, Ramesh S, **Battineni G**, Vasundhara KA, Jose J, Janani K. The effect of various in-vitro and ex-vivo parameters on irrigant flow and apical pressure using manual syringe needle irrigation: Systematic review. Saudi Dent J. 2022;34(2):87–99.
- 5. Chintalapudi N, Angeloni U, **Battineni G**, Di Canio M, Marotta C, Rezza G, et al. LASSO Regression Modeling on Prediction of Medical Terms among Seafarers' Health Documents Using Tidy Text Mining. Bioengineering. 2022;9(3).
- 6. Bhimavarapu U, **Battineni G***. Automatic Microaneurysms Detection for Early Diagnosis of Diabetic Retinopathy Using Improved Discrete Particle Swarm Optimization. J Pers Med. 2022;12(2).
- 7. Mago N, Mittal M, Bhimavarapu U, **Battineni G***. Optimized outdoor parking system for smart cities using advanced saliency detection method and hybrid features extraction model. J Taibah Univ Sci. 2022;16(1):401–14.
- 8. Chintalapudi N, **Battineni G**, Hossain MA, Amenta F. Cascaded Deep Learning Frameworks in Contribution to the Detection of Parkinson's Disease. Bioengineering. 2022;9(3).
- 9. **Battineni** G*, Hossain MA, Chintalapudi N, Amenta F. A Survey on the Role of Artificial Intelligence in Biobanking Studies. Diagnostics. 2022;12(5).
- 10. **Battineni** G*, Chintalapudi N, Amenta F. Model discovery, and replay fitness validation using inductive mining techniques in medical training of CVC surgery. Appl Comput Informatics. 2022;18(3–4):245–55.
- 11. **Battineni** G*, Chintalapudi N, Amenta F. Maritime Telemedicine: Design and Development of an Advanced Healthcare System Called Marine Doctor. J Pers Med. 2022;12(5).
- 12. **Battineni** G*, Chintalapudi N, Zacharewicz G. Process Mining in Clinical Practice: Model Evaluations in the Central Venous Catheter Installation Training. Algorithms. 2022;15(5).
- 13. Bhimavarapu U, **Battineni** G*. Skin Lesion Analysis for Melanoma Detection Using the Novel Deep Learning Model Fuzzy GC-SCNN. Healthc. 2022;10(5).
- 14. Pandey MK, Saini A, Subbiah K, Chintalapudi N, **Battineni G***. Improved Carpooling Experience through Improved GPS Trajectory Classification Using Machine Learning Algorithms. Inf. 2022;13(8).
- 15. **Battineni** G*, Chintalapudi N, Hossain MA, Losco G, Ruocco C, Sagaro GG, et al. Artificial Intelligence Models in the Diagnosis of Adult-Onset Dementia Disorders: A Review. Bioengineering. 2022;9(8).
- 16. Bhimavarapu U, Chintalapudi N, **Battineni** G*. A Fair and Safe Usage Drug Recommendation System in Medical Emergencies by a Stacked ANN. Algorithms. 2022;15(6).
- 17. Bhimavarapu U, Sreedevi M, Chintalapudi N, **Battineni G***. Physical Activity Recommendation System Based on Deep Learning to Prevent Respiratory Diseases. Computers. 2022;11(10).

- 1. Sagaro GG, Angeloni U, Marotta C, Nittari G, Rezza G, Silenzi A, et al. The Magnitude of Cardiovascular Disease Risk Factors in Seafarers from 1994 to 2021: A Systematic Review and Meta-Analysis. J Pers Med. 2023;13(5).
- Teja KV, Ramesh S, Janani K, Choudhari S, Battineni G, Gagliardi P, et al. Assessment of irrigation dynamics comparing syringe needle irrigation with various other methods of irrigation using computational fluid dynamics: a systematic review. G Ital Endod. 2023;37(1):78–87.
- 3. Mahdi SS, Jafri HA, Allana R, **Battineni G**, Khawaja M, Sakina S, et al. Systematic review on the current state of disaster preparation Simulation Exercises (SimEx). BMC Emerg Med. 2023;23(1).
- 4. **Battineni** G*, Chintalapudi N, Gagliardi G, Amenta F. The Use of Radio and Telemedicine by TMAS Centers in Provision of Medical Care to Seafarers: A Systematic Review. J Pers Med. 2023;13(7).
- 5. Gujjar V, Mago N, Kumari R, Patel S, Chintalapudi N, **Battineni G***. A Literature Survey on Word Sense Disambiguation for the Hindi Language. Inf. 2023;14(9).
- 6. Sagaro GG, Angeloni U, **Battineni G**, Chintalapudi N, Dicanio M, Kebede MM, et al. Risk prediction model of self-reported hypertension for telemedicine based on the sociodemographic, occupational and health-related characteristics of seafarers: A cross-sectional epidemiological study. BMJ Open. 2023;13(10).
- 7. Bhimavarapu U, Chintalapudi N, **Battineni G***. Multi-Classification of Lung Infections Using Improved Stacking Convolution Neural Network. Technologies. 2023;11(5).
- 8. Bhimavarapu U, Chintalapudi N, **Battineni G***. Automatic Detection and Classification of Diabetic Retinopathy Using the Improved Pooling Function in the Convolution Neural Network. Diagnostics. 2023;13(15).
- 9. Bhimavarapu U, **Battineni G**, Chintalapudi N. Automatic Classification of Hypertensive Retinopathy by Gray Wolf Optimization Algorithm and Naïve Bayes Classification. Axioms. 2023;12(7).
- 10. Bhimavarapu U, **Battineni G***. Deep Learning for the Detection and Classification of Diabetic Retinopathy with an Improved Activation Function. Healthc. 2023;11(1).
- 11. Teja K, Ramesh S, Choudhari S, Özdemir O, Janani K, Jose J, et al. Effect of various volume syringes on solution delivery time using conventional irrigation technique in 0.04 tapered preparations of single straight root canals: An ex vivo study. Saudi Endod J. 2023;13(1):51–6.
- 12. Bhimavarapu U, **Battineni G**, Chintalapudi N. Improved Optimization Algorithm in LSTM to Predict Crop Yield. Computers. 2023;12(1).
- 13. Mahdi SS, **Battineni G***, Khawaja M, Allana R, Siddiqui MK, Agha D. How does artificial intelligence impact digital healthcare initiatives? A review of AI applications in dental healthcare. Int J Inf Manag Data Insights. 2023;3(1).
- 14. Mahdi SS, Yaqoob R, Allana R, **Battineni G**, Sakina S, Agha D, Andiesta NS, Babar MG, Ahmed Z, Daood U. Monkeypox resurgence and its implications for Dentistry A scoping review. Ig Sanita Pubbl. 2023 Mar-Apr;80(2):49-59. PMID: 37154808.

Publications in non-ISI-indexed Journals

- Battineni G⁺, Chintalapudi N, Amenta F (2020) Late-Life Alzheimer's Disease (AD) Detection Using Pruned Decision Trees. Int J Brain Disord Treat 6:033. doi.org/10.23937/2469-5866/1410033
- 2. Tayebati SK, **Battineni G***, Chintalapudi N, Karami V, Nittari G, Amenta F. Process mining case study approach: Extraction of unconventional event logs to improve performance in Hospital Information Systems (HIS). Int J Comput Sci Inf Secur. 2020;17(4):117–28.
- 3. Battineni G*, Chintalapudi N, Amenta F. Tropical Conditions and Outbreak of COVID-19. Pharm Biomed Res. 2020 Oct 21;6:2020.
- 4. S R, **Battineni G**. A Survey on Recent Advancements in Auto-Machine Learning with a Focus on Feature Engineering. J Comput Cogn Eng. 2022 May 24;
- 5. **Gopi B**, Mohammad Amran H, Nalini C, Giulio N, Ciro R, Enea T, et al. Brain Imaging Studies Using Deep Neural Networks in the Detection of Alzheimer's Disease. OBM Geriatr 2023, Vol 7, 220. 2023 Jan 3;7(1):1–10.
- 6. Chintalapudi N, Dhulipalla VR, **Battineni G**, Rucco C, Amenta F. Voice Biomarkers for Parkinson's Disease Prediction Using Machine Learning Models with Improved Feature Reduction Techniques. J Data Sci Intell Syst. 2023 Apr 17;1(2):92–8.

Editorials

1. Mittal M, Battineni G, Goyal LM, Chhetri B, Oberoi SV, Chintalapudi N, et al. Cloud-based framework to mitigate the impact of COVID-19 on seafarers' mental health. Int Marit Health. 2020;71(3):213–4.

- 2. **Battineni** G*, Kumar S, Mittal M, Amenta F. COVID-19 vaccine on board ships: Current and future implications of seafarers. Int Marit Health. 2021;72(1):76–7.
- 3. **Battineni** G*, Nittari G, Sirignano A, Amenta F. Are telemedicine systems effective healthcare solutions during the COVID-19 pandemic? J Taibah Univ Med Sci. 2021;16(3):305–6.
- 4. **Battineni** G*, Pallotta G, Nittari G, Amenta F. Telemedicine framework to mitigate the impact of the COVID-19 pandemic. J Taibah Univ Med Sci. 2021;16(2):300–2.
- 5. Teja KV, Ramesh S, Vasundhara KA, Janani KC, Jose J, **Battineni G**. A new innovative automated root canal device for syringe needle irrigation. J Taibah Univ Med Sci. 2022;17(1):155–8.
- 6. Sharma R, Mittal M, **Battineni** G*, Amenta F. Applications of metaverse for improving healthcare at sea. Int Marit Health. 2023;74(2):129–30.

Book Chapters

- 1. Amenta F, **Battineni G**, Traini E, Pallotta G. Choline-containing phospholipids and treatment of adult-onset dementia disorders. Diagnosis and Management in Dementia: The Neuroscience of Dementia, Volume 1. 2020. 477–493 p.
- 2. **Battineni** G*, Mittal M, Jain S. Data visualization in the transformation of healthcare industries. Vol. 64, Lecture Notes on Data Engineering and Communications Technologies. 2021. 1–23 p.
- 3. Ravi Shankar S, **Battineni** G*, Mittal M. Cognitive computing in human activity recognition with a focus on healthcare. Cognitive Computing for Human-Robot Interaction: Principles and Practices. 2021. 51–67 p.
- 4. **Battineni G***. Machine Learning and Deep Learning Algorithms in the Diagnosis of Chronic Diseases. Vol. 968, Studies in Computational Intelligence. 2021. 141–164 p.
- 5. Pallotta G, **Battineni** G*, Nittari G, Amenta F. Psychological Stress and Mental Health Among Seafarers. Vol. 90, Lecture Notes on Data Engineering and Communications Technologies. 2022. 1–10 p.
- 6. **Battineni** G*, Hossain MA, Chintalapudi N, Amenta F. Alzheimer's Disease Classification Using Feed Forwarded Deep Neural Networks for Brain MRI Images. Vol. 128, Lecture Notes on Data Engineering and Communications Technologies. 2022. 269–283 p.
- 7. **Battineni** G*, Nittari G, Pallotta G, Sagaro GG, Chintalapudi N, Amenta F. Telehealth and Pharmacological Strategies of COVID-19 Prevention: Current and Future Developments. Vol. 366, Studies in Systems, Decision and Control. 2022. 897–927 p.
- 8. **Battineni** *G**. Opportunities and challenges in healthcare with the management of big biomedical data. Big Data Analytics for Healthcare: Datasets, Techniques, Life Cycles, Management, and Applications. 2022. 265–275 p.
- 9. Chintalapudi N, **Battineni G**, Goyal LM, Amenta F. Brain tumor classifications by gradient and XG boosting machine learning models. Predictive Modeling in Biomedical Data Mining and Analysis. 2022. 123–136 p.
- 10. Allegranti I, **Battineni G**, Garetto R. The Use of Artificial Intelligence and Mixed Reality in Preventing Natural Disasters: Practical and Legal Issues. Springer Series on Cultural Computing. 2023. 349–368 p.
- 11. **Battineni, G.***, Chintalapudi, N., Hossain, M.A., Amenta, F. (2022). Telemedicine Services and Frameworks During COVID 19: A Case Study of Seafarers. In: Mittal, M., Battineni, G. (eds) Information and Communication Technology (ICT) Frameworks in Telehealth. TELe-Health. Springer, Cham. https://doi.org/10.1007/978-3-031-05049-7_7
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Conference Proceedings

- 1. **Battineni** G*, Chintalapudi N, Amenta F. Comparative machine learning approach in dementia patient classification using principal component analysis. In: ICAART 2020 Proceedings of the 12th International Conference on Agents and Artificial Intelligence. 2020. p. 780–4.
- 2. Mittal M, Battineni G, Kumar P, Sharma P, Panwar A. IoT based image defogging system for road accident control during winters. In: Proceedings of the 2020 International Conference on Computing, Communication and Security, ICCCS 2020. 2020.
- 3. **Battineni** G*, Chintalapudi N, Amenta F, Traini E. Deep learning type convolution neural network architecture for multiclass classification of Alzheimer's disease. In: BIOIMAGING 2021 8th International Conference on Bioimaging; Part of the 14th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2021. 2021. p. 209–15.

4. Mittal, M., **Battineni, G.**, Ahmad, W., Kumar, N., Upreti, R. (2022). Mathematical Scanner (M-Scan) Mobile Application for Solving Simple Math Equations. In: Khanna, A., Gupta, D., Bhattacharyya, S., Hassanien, A.E., Anand, S., Jaiswal, A. (eds) International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing, vol 1388. Springer, Singapore. https://doi.org/10.1007/978-981-16-2597-8_29

Books

Editorials

1. Mittal M, **Battineni G**, eds. Information and Communication Technology (ICT) Frameworks in Telehealth. Published online 2022. https://link.springer.com/book/10.1007/978-3-031-05049-7

This book aims to explore technology solutions and systems to help people in remote areas improve medical care. Access to healthcare services is critical to good health, but residents of remote areas face a variety of access barriers. To overcome these problems, it is essential to develop a telemedicine system with ICT integration that will help patients in inland areas by using contemporary technologies: it would thus be possible for patients to meet their goals using these systems even without the presence of a physician since authenticated prescriptions are generated by doctors and can be transmitted to patients electronically.

2. **Battineni** G, Mittal M, Chintalapudi N, eds. Computational Methods in Psychiatry. Published online 2024. https://www.amazon.com/Computational-Methods-Psychiatry-Gopi-Battineni/dp/9819966361

This book presents a particular area of interest in computing psychiatry with the modeling of mood and anxiety disorders. It highlights various methods for building these models. Clinical applications are prevalent due to the growth and interaction of these multiple approaches. Besides, it outlines some original predictive and computational modeling ideas for enhancing psychological treatment interventions. Computational psychiatry combines multiple levels and types of computation with different data types to improve mental illness understanding, prediction, and treatment.

Author

Mittal M, Battineni G, Usharani B, Goyal LM. Text Analysis with Python: A Research Oriented Guide. Text Anal with Python A Res Oriented Guid. Published online August 11, 2022. doi:10.2174/97898150496021220101

The book focused on the latest research in the field of text mining using Python code. The main objective of the book is to apply various machine learning and deep learning techniques to textual data. Various data sets are used to show various techniques of text mining in the different research domains. This book is beneficial for the audience who want to work in the field related to text mining. In the book, the authors have presented the content of the book simply and understandably to the reader by using the step-by-step implementation of different algorithms.

Guest talks

2018: Cross-Border Contineous Medical Education (CB-CME) at Bruxells, Belgium

2019: Guest talk at Intenational Martime Health at Hamburg, Germany

2020: Presentation on AI at ICART, Malta

2022: Neuroscience forum at 10th international conference, Paris, France

Editor and reviewer

- Journal of personalized medicine (IF: 3.4)
- Algorithms (IF: 2.3)
- Frontiers in Applied Mathematics and Statistics (IF: 1.4)

Peer reviewer for journals

Diagnostics, Electronics, Applied Sciences, Energies, Cancers, Applied System Innovation, International Journal of Health Planning and Management, Maritime Business Review, Mathematics, Processes, Sensors, Transactions on Emerging Telecommunications Technologies, Algorithms, Artificial Intelligence Review, Atmosphere, Earth Science Informatics, Informatics, Journal of Multidisciplinary Healthcare, Sustainability.