Research Project: 'Can LLMs generate Bachelor or Master Thesis?'

Valid Ideas for Dataset			Bad Ideas for Dataset		
Paper Title	**Source**	**Topic**	**Paper Title**	**Source**	**Topic**
Generative Adversarial Networks for Multi-Instrument Music Synthesis	https://www.fim.uni-passau.de/fileadmin/dokumente/fakultaeten/fim/lehrstuhl/sauer/geyer/BA_MA_Arbeiten/MA-SusetzkyTobias-202006.pdf	`Generative AI`	Building a ChatGPT Clone with OpenAI API	LLM Generated	LLMs in Chatbot Development
Machine Learning Image Segmentation to Improve Object Recognition in Mixed Reality	https://cartographymaster.eu/wp-content/theses/2020_Tabares_Presentation.pdf	`Computer Vision`	Using Decision Trees for Binary Classification	LLM Generated	Classic ML
Self-supervised Domain Adaptation of Language Models for the Process Industry	https://gipplab.uni-goettingen.de/wp-content/papercite-data/pdf/luehrs2024.pdf	`Natural Language Processing`	Generating Earthquake Predictions with ChatGPT	LLM Generated	LLMs in Natural Disaster Prediction
Deep Learning Techniques Applied to Constituency Parsing of German	https://opus4.kobv.de/opus4-uni-koblenz/files/2023/master-thesis-rajasekaran.pdf	`Natural Language Processing`	Training Neural Networks to Predict Earthquakes Using social media comments	LLM Generated	Seismology and Social Media NLP
Applying Deep Reinforcement Learning in the Navigation of Mobile Robots in Static and Dynamic Environments	https://tams.informatik.uni-hamburg.de/publications/2019/MSc_Ronja_Gueldenring.pdf	`Deep Learning`	Using LLMs to Classify Plant Species	LLM Generated	LLMs in Biology
Graph Neural Networks for Electrical Grid State Estimation	https://ad-publications.cs.uni-freiburg.de/theses/Master_Armin_Saur_2024.pdf	`Neural Networks`	Optimizing Sorting Algorithms with LLMs	LLM Generated	Algorithms & LLMs

Representation Learning on Electronic Health Records Using Graph Neural Networks	https://wwwiti.cs.uni-magdeburg.de/iti_db/publikationen/ps/auto/MastersThesis:altaf:2023.pdf	Data Analytsis	Developing Artificial General Intelligence (AGI)	LLM Generated	Artificial Intelligence
Deep Reinforcement Learning for Decentralized Autonomous Decision-Making in Federated Satellite Systems	https://mediatum.ub.tum.de/node?id=1762443	Deep Learning	Direct Brain-AI Communication Using Neural Implants	LLM Generated	Neurotechnology
Artificial intelligence-assisted data analysis with BayesDB	https://dspace.mit.edu/handle/1721.1/119517	Generative AI	Improving Artificial Intelligence	LLM Generated	General AI
Data analysis and simulation approach to capacity planning	http://dspace.mit.edu/handle/1721.1/110893	Data Analysis			
Emotional response modeling in financial markets : Boston Stock Exchange data analysis	https://dspace.mit.edu/handle/1721.1/28481	Data Analysis			
Exploration of Different Large Language Models for Retrieval-Augmented Generation in Analyzing Wearable Running Data for Sports Physiotherapy	http://essay.utwente.nl/101017/1/Chiras_%20BSc%20_EEMCS.pdf	Generative AI			
Evaluating Large Language Models for Automated Cyber Security Alarm Analysis Processes	https://essay.utwente.nl/essays/100846	Generative AI			

Automatic Evaluation of Companies' Alignment with EU Taxonomy Using Large Language Models	https://essay.utwente.nl/essays/102987	Generative AI			
Variational Auto-Encoder for Latent Uncertainty Encoding in Large Language Models	https://essay.utwente.nl/fileshare/file/104932/Paun_MA_EEMCS.pdf	Machine Learning			
Using Machine Learning Methods for Evaluating the Quality of Technical Documents	https://artificial-intelligence.amitrajsantosh.com/Using%20Machine%20Learning%20.pdf	Machine Learning			
Application of machine learning algorithms for classification and regression problems for mobile game monetization	https://monami.hs-mittweida.de/frontdoor/index/index/year/2020/docId/11573	Machine Learning			
Application of Machine Learning in Economic Optimization	https://ntnuopen.ntnu.no/ntnu-xmlui/handle/11250/2824820	Machine Learning			
Sanity Checks for Explanations of Deep Neural Networks Predictions	https://webthesis.biblio.polito.it/15595/	Machine Learning			
Machine Learning in Application-Based Case Management	https://arxiv.org/pdf/1906.07154	Machine Learning			
An Assessment of Zero-Shot Open Book Question Answering using Large Language Models	https://studenttheses.uu.nl/handle/20.500.12932/44625	Natural Language Processing			

Predicting the Need for Test Maintenance Using LLM Agents	https://odr.chalmers.se/items/3beb73ab-e0a9-4a8d-98d5-34415120571f	Software Engineering			
Evaluating the Carbon and Energy Implications of LLM Integration in Software Development	http://essay.utwente.nl/105219/	Software Engineering			
Impact of Loss Functions in Fine-Tuning Large Language Models for Improving Sentence Embeddings	https://uwindsor.scholaris.ca/server/api/core/bitstreams/2614d75a-9bdc-47fa-b727-9e736c1e9edd/content	Natural Language Processing			
Improving Large Language Models in Repository-Level Programming through Self-Alignment and Retrieval-Augmented Generation	https://www.inf.uni-hamburg.de/en/inst/ab/lt/teaching/theses/completed-theses/2024-ma-strich.pdf	Software Engineering			
Knowledge-Informed Fake News Detection using Large Language Models	https://uwindsor.scholaris.ca/bitstreams/48715f07-ff13-460f-a165-144bffc68944/download	Natural Language Processing			
Large Language Models for Documentation: A Study on the Effects on Developer Productivity	http://www.diva-portal.org/smash/record.jsf?pid=diva2:1863966	Software Engineering			
LLMPred: Fine-Tuned Large Language Model Embeddings for Drug Side Effect Frequency Prediction	https://uwindsor.scholaris.ca/items/17e7614e-9a0e-4ff0-bbcf-392c181d9be4/full	Bioinformatics			

Evaluating Pre-Trained Language Models on Partially Annotated Datasets	https://epub.ub.uni-muenchen.de/92623/1/MA_Rizzo.pdf	Natural Language Processing			
Optimizing Large Language Models for Network Intrusion Detection Systems	https://uwindsor.scholaris.ca/bitstreams/6c273af2-8070-4295-9265-727ad1319f5b/download	Cybersecurity			
Exploring Large Language Models and Retrieval-Augmented Generation for Automated Form Filling	https://essay.utwente.nl/96259/	Generative AI			
RefineCode: Enhancing Code Quality through Actionable Code Review Recommendations and Intelligent Issue Resolution	https://www.researchgate.net/publication/394465408_RefineCode_Enhancing_Code_Quality_Through_Actionable_Code_Review_Recommendations_and_Intelligent_Issue_Resolution	Software Engineering			
Question Answering in the Financial Domain	https://arxiv.org/abs/2504.15800	Natural Language Processing			
QA4R: A Question Answering System for R Packages	https://search.proquest.com/openview/b148421b4964ab297e6c43861edb029b/1?pq-origsite=gscholar&cbl=18750&diss=y	Natural Language Processing			
Misinformation Identification Using Large Language Models	https://arxiv.org/abs/2510.18918	Natural Language Processing			

Job–Resume Compatibility Scoring Using Graph Neural Networks and Transformer Embeddings	https://uwindsor.scholaris.ca/items/a9e943a4-3852-4862-84b0-d5e0ffdba470/full	Machine Learning			
The Use of Large Language Models in Mobile Application Testing	https://helda.helsinki.fi/items/2f80aa1d-f4ec-47db-9695-3914decb7de3	Software Engineering			
Do Graph-Based Approaches Outperform Vector-Based Approaches in Retrieval-Augmented Generation?	https://www.cs.cit.tum.de/fileadmin/w00cfj/sebis/thesis/240515_Saade_Kickoff.pdf	Natural Language Processing			
Large Language Models as an Aid for Software Development Using Graphical Programming Language	https://trepo.tuni.fi/bitstream/10024/153734/2/TiljanderVille.pdf	Software Engineering			
Code Comment Generation by Incorporating Pre-defined Application Programming Interface Documentation	https://arxiv.org/abs/2303.01645	Software Engineering			
Advancing Intrinsic and Non-Intrinsic Bug Classification with NLP, Machine Learning, and Few-Shot Prompt Engineering	https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0444146	Software Engineering			

Investigating Automatic Bug Repair Using Large Language Models for Digital Hardware Design	https://ucalgary.scholaris.ca/items/4f3861e1-c8d4-4b31-aa44-8f3cb0e7b215	Machine Learning			