Supervisor Name	Room	Extension	email	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6	Project 7	Project 8	Project 9	Project 10
Andrew McCarren	L235	8456	andrew.mccarren@dcu.ie	~~Using data analytics to predict player load in high performance athletes.~~	~~Characterising CPS signal data using unsupervised learning.~~	~~Predicting commodity prices using machine learning techniques.~~	Identifying meat cuts using ensemble techniques						
Alan Smeaton	N110a	email ----->>	alan.smeaton@dcu.ie	Last year's practicums are in red in the rest of this row and I include them just to show the kind of topics I've supervised. **This year's practicum suggestions are** here.	Mine Facebook Ad Library for patterns to indicate underlying marketing strategies (TAKEN - i.e. done last year)	Realtime keystroke analysis (typing) as indictors of mood (TAKEN - i.e. done last year)	Determine explanations for detected anomalous traffic flows from flow map archives (Taken - i.e. done last year)	GANs to generate interactive video dialogue (TAKEN - i.e. done last year)	Develop a GAN to generate synthetic air traffic control conversations (taken - i.e. done last year)	Analyse EEG from two participants in a collaborative task to search for Neuronal Synchrony across participants	Detecting video deepfakes using Euler video magnification (TAKEN - i.e. done last year)	Using sensors to capture circadiam rhythms and periodicity in farm animals and relationship to wellbeing and health (TAKEN - i.e. done last year)	The influence of Quality of Life metrics on the house rental market (TAKEN - i.e. done last year)
Tomas Ward	L2.40		tomas.ward@dcu.ie	Applications of machine learning to improved understanding and monitoring of human health, performance and decision making - anything that satisfies this I am open to supervising									
Murat Yilmaz	L2.38		murat.yilmaz@dcu.ie	Digital Twin of DCU project.	Augmented Reality-Based Virtual Assistant	A pathed route planner for autism-friendly DCU	Coronavirus Simulator – A personality-based agent modeling in VR using social epistemology.	The design of gamed social simulations using game theory.					
Suzanne Little	L2.37	email	suzanne.little@dcu.ie	Computer vision (image analytics) - See https://visualdata.io/ for example datasets and challenges	Answering questions from scientific plots (https://dmnlp.github.io/PlotQA/)	Adversarial attacks on deep convolutional neural networks (Can you fool a self-driving car?)	Modelling motion in videos (either human, traffic or other observations)	Generating synthetic and augmented training data for object detection, segmentation or classification (images)	Can you model computer vision bias using emojis?				
Brian Davis	L2.26	email	brian.davis@dcu.ie	General Purpose Knowledge Based Relation Extraction System from Text	Named Entity Recognition and Classification for Irish	Political Oppinion Mining from Microblogs	Natural Language Generation (pipelined neural approaches)	Generating Poetry from Fitbit Data https://eververse.nuigalway.ie/	NLP for Social Media	Generating textual summaries from Irish Weather data - Neural NLG			
Graham Healy	L2.36	email	graham.healy@dcu.ie	Facial Expression Recognition for videos	Transfer learning applications	Machine learning/deep learning for Brain-computer Interfacing	Analysing images and video to detect clothing (DeepFashion dataset)						
Martin Crane	L2.51	email	martin.crane@dcu.ie	~~Analysis of ITM Indian Monsoon data~~	Cryptocurrency Price Dynamics analysis								
Annalina Caputo	L2.28	8056	annalina.caputo@dcu.ie	Point-Of-Interest (POI) Recommendation	COVID-19 Retrieval dataset (i.e. https://www.kaggle.com/c/trec-covid-information-retrieval/data)	Diachronic Analysis of Language via Word Embeddings	Semantic Predictors of Knowledge Gain in Informational Search Sessions	other projects: https://annalina.github.io/student_projects/					
Silvana Togneri MacMahon	L2.28	email	silvana.macmahon@dcu.ie	Interoperability standards for IOT in Healthcare	Risk Management Communication across multidisciplinary teams	Managing change in Health Information Technology Systems							
Geoff Hamilton	L2.55	email	geoffrey.hamilton@dcu.ie	Smart Contract Verification Tool	Program Verification Tool	Program Termination Tool	Reactive System Verification Tool	Theorem Proving Tool	Program Construction Tool	Energy Efficient Computing Tool	Program Complexity Analysis Tool	Security Protocol Verification Tool	
Michael Scriney	L2.31	email	michael.scriney@dcu.ie	Anomaly detection in transport networks	Transfer learning on transport networks	Mining ETL workflows	Smart Cities	Graph analysis	Temporal networks	Viewing habits time series analysis			
Andy Way	L217	email	andy.way@adaptcentre.ie	Named Entity Recognition with Neural Networks	Human-Computer interaction	Studying Translationese in Machine Translation	Online Learning for Neural Machine Translation	Neural Machine Translation in Low Resource Scenarios	Machine Translation of Critical Domain Data	Error analysis of automatic translation 'gold standard' test sets	Building named entity recognition systems	Categorising multilingual customer feedback	
Cathal Gurrin	L2.42	email	cathal.gurrin@dcu.ie	Novel Analytics of Wearable Camera Data to detect logos and objects	Quantified-self fitness data analytics	Visual Storytelling from personal data / lifelog archives	Multimodal Data Analytics to identify daily life activities for personal health (next generation fitbit).	**Next-generation user profiles for recommendation - using real-world activities**	**Consumer Analytics from fixed CCTV cameras to provide retailers with informaton on their customer types**	Analytics of spoken words in real-life conversation to provide memory support services for elderly people.	Co-occurance analysis of user activities using real-life lifelog data to build models of people in daily life.		
Mark Roantree	L2.34	email	mark.roantree@dcu.ie	Analysis of Graph v Relational Clustering Methods	Analysis of Graph v Relational Prediction algorithms	If you have your own idea, I can help you.							
Gareth Jones	L2.01D	email	gareth.jones@dcu.ie	Searching for information nuggets in knowledge graphs and augmenting them with novel information	Dialogue-based engagement with search engines	Enhancing search engines using knowledge-graphs	Extracting and exploiting information nuggets from online sources for a better informed society	Improved search using question-guided interaction support	Exploring the appliction of reinforcement learning in search				
Alessandra Mileo	L2.45	email	alessandra.mileo@dcu.ie	Graph analytics and knowledge graphs meets deep learning	Learning to generate deep explanations through automatic extraction of taxonomies from deep representations	Network dissection, disengangled representation and local explanation in CNN	Any topic in the area of neuro-symbolic computation and the combination of knowledge (graphs, rules, relational structures) and deep learning models, including the generation of new benchmarks and comparative analysis/evaluation of existing approaches to generating explanation for DNN in terms of qualitative and/or quantitative analysis.						
Jennifer Foster	L2.16	5263	jennifer.foster@dcu.ie	Story Generation: can neural nets generate believable stories?	Using neural nets to build Irish language technologies	Explainable AI: how to explain and visualise the decisions of a deep neural net?	Machine Reading Comprehension: can a neural net understand and answer questions about a text?	Anything related to Natural Language Processing					
Takfarinas Saber	L2.38	6831	takfarinas.saber@dcu.ie	Testing Machine Learning Pipelines: Requires: Eclipse, Java, and knowledge of an ML Plateform (e.g., Azure ML)	Evolutionary Learning for Better Intelligent Transport Systems: Requires Python	Optimising Early Childhood Education and Care	Data-Driven Optimal Regional Integration of Customs Unions						
Rob Brennan	L2.44	email	rob.brennan@dcu.ie	https://www.computing.dcu.ie/~rbrennan/projects.html	FAIR data assessment and management	Operationalising data governance with linked data	Data protection/GDPR/AI governance processes and systems	Knowledge graphs/semantics	Automated assessment of data quality				
Hossein Javidnia	L2.15	email	hossein.javidnia@dcu.ie	Portrait matting with the application in video conferencing apps	Low quality facial image restoration using generative models	Monocular image inpainting using generative models	RGBD human body reconstruction	3D pointcloud completion	Stereo/mono depth map completion				
Anya Belz	L2.01		anya.belz@dcu.ie	Building a GAN that checks whether the meaning of two word strings is the same	Classifying citations in academic papers into work-used, positive, negative and neutral based on the surrounding text, using neural sentiment classification approaches	Building a Gaelic language generation system that produces fact descriptions, using this dataset: https://paperswithcode.com/dataset/webnlg							