

AI

Project Name
Artificial Humanity
Project Description:
<p>This project seeks to simulate certain aspects of human-like decision-making. The intention is not for accurate reproduction or simulation of human behaviour, but something that is contextually appropriate to an observer or player. To elaborate, the intention is to produce believable, or engaging behavior that would suit a creative application such as films and games.</p> <p>The student can pick any aspect of humanity inspired decision-making, but ethics and emotions are of particular interest.</p> <p>This project would best suit a student with a strong interest in creative applications, but is not limited to the Games Computing degree programme.</p>
Are there any prerequisite skills / courses?
NA
Which degree program is this aimed at? (It can be more than 1)
Computer Games Programming / Computer Science
Number of students you wish to undertake this project
4

Your Name: Sills & Betteridge LLP, Solicitors (Andrew Kerrigan or colleague) + SoCS mLearn & CS

Link to your staff profile page:

Any other relevant links to your research:

<https://www.legalfutures.co.uk/latest-news/regional-firms-motoring-law-chatbot-first-of-many>

<http://www.thebusinessdesk.com/eastmidlands/news/2017203-law-firm-launches-legal-tech-drive>

Complete this form for each project that you propose:

Project Name
Health and safety sentencing guide or daily assistant
Project Description:
<p>The penalties for breach of health and safety law vary substantially depending on the circumstances of the breach. It is often difficult for businesses and professionals to properly assess and predict the outcome of health and safety investigations and prosecutions.</p> <p>The project is to develop a web based tool to assist businesses, solicitors, insurers and others estimate the penalty risk arising from a breach of health and safety legislation. The tool may utilize an element of machine learning/AI technology.</p> <p>Users of the tool should be guided through the decision tree of health and safety guidelines and the information provided will be cross-referenced against the HSE database of prosecution results collated since 1 February 2016. The tool will provide the user with a list of relevant decided cases more accurately than a search engine (e.g. Google or equiv.) and more efficiently than manually trawling through the HSE database.</p> <p>Alternatively, or in addition, the project might consider whether it is possible to utilize a machine learning tool to create a health and safety daily assistant which asks a question such as "What is the next task you are about to perform?" in</p>

<p>response to which the assistant will search for and provide the most relevant health and safety guide to assist with that task and also find relevant cases which illustrate the type of accidents people have suffered whilst undertaking that task.</p> <p>If, subject to review and testing, the web based tool is successful, the project may be published on the Sills & Betteridge website and/or promoted by Sills & Betteridge for the benefit of its clients.</p>
<p>Are there any prerequisite skills / courses?</p> <p>Computing, database, ML/AI, web app; teaming up with Law student a +</p>
<p>Which degree program is this aimed at? (It can be more than 1)</p> <p>BSc; MComp/MSc (depending on the extent of the ML/AI component and level of implementation)</p>
<p>Number of students you wish to undertake this project</p> <p>No preference.</p>

Your Name: Sills & Betteridge LLP, Solicitors (Andrew Kerrigan or colleague) + SoCS CS

Link to your staff profile page:

Any other relevant links to your research:

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<http://www.thebusinessdesk.com/eastmidlands/news/2017203-law-firm-launches-legal-tech-drive>

Complete this form for each project that you propose:

Project Name
Pot Hole claims platform
Project Description:
<p>The poor state of repair of some roads in Lincolnshire and other counties frequently causes motorists to suffer damage to their vehicles. In some circumstances local authorities are liable to compensate motorists for this damage. Unfortunately, obtaining legal advice to help pursue these claims can be prohibitively expensive and many motorists find it difficult to get clear advice regarding their particular circumstances and where to send their claim.</p> <p>The project is to design a web page/platform/app which enables members of the public who have suffered damage to their vehicle from pot holes to capture the location of the incident, identify the responsible local or roads authority, upload relevant evidence, populate a standard "letter of claim", all through a text chat style interface. The web page/platform/app will email the user a copy of a completed letter of claim, populated with the relevant information and enclosing or attaching the relevant evidence, together with the email address the letter needs to be sent to.</p> <p>If, subject to review and testing, the web page/platform/app is successful, the project may be published on the Sills & Betteridge website.</p> <p>An extension to this project may be to create a general incident notification/capture platform by which law firms can produce similar procedures to generate letters of claim in other areas of the law.</p>
Are there any prerequisite skills / courses?
Computing, web/mobile app; teaming up with Law student a +
Which degree program is this aimed at? (It can be more than 1)
BSc; MComp/MSc (depending on the extent of the ML/AI component and level of implementation)
Number of students you wish to undertake this project

No preference.

List of Projects for Final Year Supervision

Your Name: Mark Doughty

Link to your staff profile page: staff.lincoln.ac.uk/mdoughty

Any other relevant links to your research:

Complete this form for each project that you propose:

Project Name
Cultural and Creative Computing: Creating images from social media feeds
Project Description:
<p>Abstract image generation using extracted information from a social media (eg. Twitter) feed.</p> <p>This project will begin to explore the cultural signification and representation of items in technology which have become part of everyday life, but which don't have a physical manifestation – such as the metadata of a Twitter stream defined by its 'hashtag'. In undertaking this project, abstract images will be generated from twitter streams. This will give a unique and alternative view of social media meta-data, and allow us to view these artefacts through a different lens.</p> <p>Using technology such as Shiny/R to capture and process tweets, images could then be constructed from their metadata.</p>

Are there any prerequisite skills / courses?
Programming
Which degree program is this aimed at? (It can be more than 1)
Any
Number of students you wish to undertake this project
Any

Your Name: Vassilis Cutsuridis

Link to your staff profile page: <http://staff.lincoln.ac.uk/vcutsuridis>

Any other relevant links to your research: <http://www.vassiliscutsuridis.org/>

Complete this form for each project that you propose:

Project Name
Neuromorphic computing
Project Description:

Google, Apple, Intel, Qualcomm, Brain Corporation and numerous AI start-ups are currently hiring computer science graduates with neural computing expertise.

Would you like to be one of them?

Come by my office and let's chat about what you can do along these lines. There are lots of ideas for you to pursue.

Are there any prerequisite skills / courses?

1. Basic knowledge of computer programming
2. Honest desire to learn brain science

Which degree program is this aimed at? (It can be more than 1)

BSc/MComp Computer Science

Number of students you wish to undertake this project

Any

