



Funding Type: EPSRC Studentship
Project Title: Smart Urban: Sensors, OpenData, The Crowd and the Internet of Things
Funding Duration: 3 years
Annual Stipends: Year 1: £15,980pa (tax free) + tuition fees + travel allowance
Year 2: £16,380pa (tax free) + tuition fees + travel allowance
Year 3: £16,790pa (tax free) + tuition fees + travel allowance
Department: UCL Centre for Advanced Spatial Analysis, The Bartlett
Closing Date: 13th August 2012
Start Date: 1st October 2012

Vacancy Information

Three year funded PhD studentship in Smart Urban: Sensors, Opendata, The Crowd and the Internet of Things based at the UCL Centre for Advanced Spatial Analysis.

Studentship Description

Emerging open source sensors, connected objects, diverse data feeds and crowd-sourcing techniques are moving us towards a new age in our understanding of place and space. Working on a macro 'smart-city' scale down to the micro 'hyper-local' level we are able to collect and analyse data relating not only to the external operations of the city but increasingly into the buildings themselves. We are connecting, sensing, monitoring and visualising our environment, people and objects at an every increasing rate, creating need for spatial analysis combined with new research methods to aid our understanding of these emerging data feeds.

The research will focus on deploying, collating, visualising and communicating various data feeds to enhance our understanding of the 'smart cities' and 'smart places' towards creating a hypothesis around smart urban systems. From using motion sensors, such as the Xbox Kinect, though to emerging innovative devices such as the 'Air Quality Egg' combined with feeds from various data stores, check-ins and onwards to connected devices via the Internet of Things the candidate will require an innovative approach to research.

Supervision Arrangements

The primary academic supervisor will be Dr Andrew Hudson-Smith FRSA. Dr Andrew Hudson-Smith is Director and Deputy Chair of the Centre for Advanced Spatial Analysis (CASA), he is Editor-in-Chief of Future Internet Journal, an elected Fellow of the Royal Society of Arts and Course Founder and Director of the MRes in Advanced Spatial Analysis and Visualisation at University College London. He is the author of 'Digital Urban' <http://www.digitalurban.org>.

About CASA

The Centre for Advanced Spatial Analysis (CASA) is a centre in the Bartlett Faculty of the Built Environment (The Bartlett). The Bartlett is University College London's world-leading faculty for multidisciplinary education and research for the built environment. CASA's focus is to be at the forefront of what is one of the grand challenges of 21st Century science: to build a science of cities from a multidisciplinary base, drawing on cutting edge methods, and ideas in modelling, complexity, visualisation and computation. Our current mix of architects, geographers, mathematicians, physicists, archaeologists and computer scientists make CASA a unique department within UCL.

CASA is central to this new science, the science of smart cities, and the relationship to city planning, policy and architecture in its widest sense. The focus is on advancing the state of the art through the application of computer models, data visualisation techniques, innovative sensing technologies, mobile applications, data visualisation and urban and regional theory linked to city systems.

www.casa.ucl.ac.uk

Eligibility Criteria

Residency

All candidates for the full award (fees plus full stipend) must have established UK residency. To check whether or not you are eligible please consult the EPSRC eligibility criteria at <http://www.epsrc.ac.uk/funding/students/pages/eligibility.aspx>.

Academic Qualifications

The applicant should possess a good honours degree (1st Class or 2:1 minimum); an MSc/MRes in Advanced Spatial Analysis, Computer Science, Geoinformatics, Computational Social Sciences, or related disciplines. You need to be familiar with geographic information and software development, and be able to work with a team that will include computer scientists, social scientists, strategists and policy makers.

How to apply

Your application will only be considered if you complete both parts of the application process.

- Applicants should complete the online application form on the UCL Postgraduate Application and Entry page (<http://www.ucl.ac.uk/prospective-students/graduate-study/application-admission>). You should ensure your references; transcripts etc are in place so your application can be considered in time. Please enter the programme as Research Degree: UCL Centre for Advanced Spatial Analysis (RRDCASSING01); and name Dr Andrew Hudson-Smith as the proposed supervisor.
- In addition, applicants should email the following to Sonja Curtis at s.curtis@ucl.ac.uk
 - a cover letter (addressed to Dr Andrew Hudson-Smith, UCL CASA) of a maximum one page in length, demonstrating how and why you think you are suitable for this studentship;
 - a two-page research proposal based on the project description;
 - a CV;