James O'Connor

http://jp-oconnor.com
james.oconnor@kingston.ac.uk | Phone number masked

PROJECTS

SENTINEL BOT
Twitter account which posts a Sentinel-2 satellite image every 30 minutes | http://twitter.com/sentinel_bot

PERSONAL BLOG
Details aspects of my research, with explanations and tutorials | jamesoconnorkingston.wordpress.com

GREYSCALER
Esoteric greyscaling algorithms via django web app | tinyurl.com/greyscaler

EXPERTISE

Python
Web Development (Django)
Predictive Modelling
Scikit-learn
Tensor Flow
OpenCV
Data Science
Databases
Image Processing
GIS/Mapping

LINKS

LinkedIn:// jamesoconnor12
Github:// JamesOConnor
Twitter:// James_O_Connor1
Wordpress:// jamesoconnorkingston
Website:// jp-oconnor.com
Kaggle:// james0c

SKILLS

COMPUTING

Languages
Python • Linux • Django • Javascript • Imagemagick • MSSQL • git

Software packages
Microsoft office • PyCharm IDE • ArcGIS/QGIS

LANGUAGES

English (Native)
Spanish (Fluent)
French (Basic)

EDUCATION

KINGSTON UNIVERSITY LONDON | PhD Candidate
September 2014 - Present | London, UK
Thesis entitled 'Optimisation of aerial surveying from Unmanned Aerial Vehicles (UAVs)'. Used custom image processing techniques developed using python OpenCV and photogrammetric packages for generation of detailed 3D data using Structure-from-Motion (SfM) photogrammetry.

UNIVERSITY COLLEGE LONDON | Remote Sensing Masters | Distinction
September 2013 - September 2014 | London, UK
Thesis investigated the accuracy of a radiative transfer model (Joint Research Council's two-stream inversion package). Used large amounts of satellite data (MODIS) for comparison using custom python scripts.

TRINITY COLLEGE DUBLIN | Bachelor of Science | 2:1
September 2006 - September 2010 | Dublin, Ireland
Thesis investigated biodiversity of urban pollinators in Dublin city centre and methods for promoting diversity. Fieldwork skills in generating data for Environmental Impact Assessments.

EXPERIENCE

EARTH OBSERVATION DATA SCIENTIST - KISANHUB
February 2018 - present
Interacted with multiple external APIs for provisioning of satellite imagery from different sources for KisanHub's web application. Automated image processing pipelines to deliver processed data via a microservice. Trained and tested models to provide more accurate feedback on land-surface state. Followed AGILE methodologies for software development.

RSPSOC SENSED EDITOR
June 2015 - present
Have sat in council meetings and engaged in discussions on how to grow the society. Organised and ran a 3 day conference at Kingston in March 2017 as part of my duties. SENSED is a quarterly magazine produced by the society, of which I am an editor.

DEVELOPER - QUARTZ SYNDICATE
November 2015 - November 2017
Used python scikit-learn toolbox to train models in prediction of outcomes of sporting events. Specific tools include logistic regression, tree-based learners (LightGBM) and tensor-flow neural networks to refine predictions.

PAPERS

2017 Cameras and settings for aerial surveys in the geosciences: optimizing image data Progress in Physical Geography - DOI

SOCIETIES

2014 - Present Remote Sensing and Photogrammetry Society