# Minerva Analytics Training on Python and Natural Language Processing

Objective of the training

As part of the strategic vision of Minerva Analytics Ltd, the directors wish to bridge skills gaps within the team of analysts and the technical team by providing training on Python and Natural Language Processing.

This training will form one part of a phased project which will see the team autonomize data gathering and create additional resource within the team for in-depth reports for the business, thus giving the company a competitive edge in their market.

## Format

A two day interactive workshop providing delegates with an overview of Python and Natural Language Processing as well as practical application of the programmes within the context of the company.

The data used during the training will be provided by Minerva Analytics.

Course Overview

**Agenda: Session 1 – Introduction to Python**

9.30 Arrival

10.00 – 10.30 Introduction to the session

10.30 – 11.30 Introduction to Python

11.30 – 11.45 Break

11.45 – 13.00 Workshop using Minerva data

13.00 – 13.45 Lunch

13:45 – 14.45 Python and data

14.45 – 16.00 Workshop using Minerva data

15.30 Close

**Agenda: Session 2 – Introduction to Natural Language Processing (NLP)**

9.30 Arrival

10.00 – 10.30 Introduction to the session

10.30 – 11.30 Introduction to Natural Language Processing

11.30 – 11.45 Break

11.45 – 12.30 Workshop using Minerva data

12.30 – 13.15 Lunch

13:15 – 14.15 A deep dive into NLP within the context of research for sustainable governance, global proxy voting and diverse data, smarter stewardship

14.15 – 15.30 Workshop using Minerva data

15.30 Close

## Date

Introduction to Python: 3rd October 2018

Introduction to Natural Language Processing: TBC

## Venue

Introduction to Python: 3rd October 2018

Lab O

Tony Rich Teaching Centre

University of Essex

Colchester

Essex

CO4 3SQ

Introduction to Natural Language Processing: TBC

TBC

University of Essex

Colchester

Essex

CO4 3SQ

## Delegates and pre-requisite knowledge

Delegate number: 18.

Delegates will consist of the Minerva analysts and technical team. Most staff hold degree-level qualifications.

The delegates have a good working knowledge of Access. Some delegates use Access SQL within their work and are learning PG-SQL. Other staff are manual text miners and have a good working knowledge of Excel.

The analysts will hold a basic understanding of HTML.

All training will be tailored to the requirements of the delegates building on foundational knowledge.

Software requirements

All delegates will require Anaconda and access to desktop PCs for both sessions. In addition to Python NLP library NLTK.

## Next steps

The Centre will work with Minerva Analytics to explore further training requires as required.

The Centre is supporting Minerva Analytics with a research project funded through the DAIV scheme.

## Speaker Biography

Richard Skeggs, Senior Data Manager at the BLG Data Research Centre

Richard joined the Centre in 2014 and focuses on document management, report archiving and big data. Richard is responsible for the collection and curation of data with a focus on business and impact. He also provides data users with information and support tailored to their business objectives.

Richard is an experienced facilitator leading director level training on behalf of the Centre including technical application of software, data analytics and research techniques.

Richard has a technical background having worked within systems administration, database programming and web based application development since 1996. Previously as a technical consultant he has been responsible for designing, developing and delivering highly scalable customer solutions.

Richard has a particular interest in:   
Oracle development and administration, Java, Perl, Unix and Linux system administration, Technical and Information Architecture, Solution Delivery, Change management, Hadoop infrastructure and Proposed Schedule.