

# ODUWA EDO-OSAGIE

Finishing PhD Student with a Software Engineering background and a specialism in *Natural Language Processing*, *Machine Learning* and *Social Media Mining*.

## EDUCATION

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- 2016 – 2019 **PhD: Developing Machine Learning Techniques For Syndromic Surveillance using Social Media Data**  
*The University of East Anglia, Norwich*
- 2015 – 2016 **MSc: Advanced Computing Science**  
FINAL GRADE: DISTINCTION  
*The University of East Anglia, Norwich*
- 2012 – 2015 **BSc: Software Engineering**  
FINAL GRADE: STARRED FIRST CLASS  
*The University of East Anglia, Norwich*

## PERSONAL PROJECTS

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- **Automatic Text Summarizer (github)**  
*Neural text summarization application for medium-to-large texts as well as short texts*
- **Lil JadenBot (github)**  
*Neural language model for the generation of rap lyrics based on Jaden Smith songs*
- **Classifiers4Cocoa (github)**  
*Implemented classification models from scratch for use in iOS development.*
- **Customer Service Bot (github)**  
*System for automatically predicting the intent of a customer service message and responding appropriately*
- **Pic-numero (github)**  
*Project exploring counting objects in images using computer vision.*
- **Luderé Playlist Recommendation Engine (github)**  
*Desktop app using a machine learning powered engine to suggest new music based on a user's taste*
- **Jive (promo website)**  
*A machine learning-powered music discovery iOS app with its own backing music discovery engine.*
- **Gary (github)**  
*A general purpose programming language with a twist - customisable keywords!*
- **GameBoy Emulator (YouTube)**  
*An emulator for the Nintendo GameBoy.*

For more of my work, please see my website and Github below.

## AWARDS AND MISCELLANY

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- Winner of 2015 Facebook-Intertech Hackathon (link)
- First Place, UEA Mobile App Challenge 2014

## WORK EXPERIENCE

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APRIL 2019

The Alan Turing Institute for Artificial Intelligence, London

### Data Study Group Researcher

Selected to collaborate on a short-term project with other researchers to brainstorm and engineer AI and data science solutions to real-world problems for organizations from industry using machine learning.

JANUARY 2016 - JULY 2019

Populi.io, London

### Machine Learning Engineer (Part-time)

Research and implement machine learning techniques for new features to improve product experiences. Also work on gaining commercial insight using large amounts of customer behaviour and app usage data. Gained experience working with distributed data using Hadoop and cloud platforms.

APRIL 2017 - DECEMBER 2017

NOMTEK, Wroclaw

### Machine Learning Consultant

Assisted with projects requiring machine learning expertise. Completed a natural language processing project that involved making a clone of the Amazon echo device. Was responsible for project and saw it through from conception through to production and beyond.

JANUARY 2017 - MARCH 2019

University of East Anglia, Norwich

### Data Mining Teaching Assistant

Ran seminars and lab sessions for the data mining module where I taught and demonstrated different statistical and NLP techniques for data and text mining.

SUMMER 2015

RealVNC, Cambridge

### Software Engineering Intern

Was responsible for creating a VNC server for the Android platform. Created a way to gain remote access to Android devices from other kinds of devices. Had to work with a large codebase, engineering a highly performant system.

## PUBLICATIONS

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- 2019 **Edo-Osagie, Oduwa, et al. "Attention-based Recurrent Neural Networks for Short Text Classification in Social Media Mining and Public Health Monitoring." International Work-Conference on Artificial Neural Networks 2019.**  
*Accepted and awaiting publication. Request Manuscript*
- 2019 **Edo-Osagie, Oduwa, et al. "Using Twitter To Generate Signals For The Enhancement Of Syndromic Surveillance Systems: Semi-Supervised Classification For Relevance Filtering in Syndromic Surveillance." BioRxiv (2019): 511071.**
- 2018 **Edo-Osagie, Oduwa, et al. "Deep Learning for Relevance Filtering in Syndromic Surveillance: A Case Study in Asthma/Difficulty Breathing." International Conference on Pattern Recognition Applications and Methods 2019. No. 8. 2019.**

## SKILLS

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ADVANCED	Python, MATLAB, Objective-C, C/C++, TensorFlow, Java, Numpy, Scikit-Learn, Pandas, SQL, Flask
INTERMEDIATE	Hadoop, Swift, Bash, MongoDB, R
BASIC LEVEL	Julia, Ruby, Go, Scala

## RELEVANT LINKS

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OPEN-SOURCE WORK	<a href="https://github.com/oduwa">https://github.com/oduwa</a>
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