

# Alexandros Kastanos

alecokastanos@gmail.com | +44 7927 315192 | U.K. work authorisation | alecokas.github.io

## PERSONAL DETAILS

### Address:

480 Hornsey Road, London,  
United Kingdom, N19 4EF

### Languages

English (Mother Tongue) • Greek (Basic) •  
Afrikaans (Basic)

### Citizenship:

U.K and South Africa

## EDUCATION

### UNIVERSITY OF CAMBRIDGE

Master of Philosophy in Machine  
Learning and Machine Intelligence  
Oct 2018 - Sept 2019, Magdalene College  
MPhil class representative

**Thesis title:** Uncertainty and confidence  
scores for sequence data (71%)

### UNIVERSITY OF THE WITWATERSRAND

#### BSC IN ENGINEERING (ELECTRICAL)

Graduated with Distinction

Jan 2014 - Dec 2017

**Project title:** Adaptive digital hearing aid  
that adapts to a changing acoustic  
environment (90%)

### SAHETI SCHOOL

7 Distinctions

Grade 0 - 12 | 2001 - 2013

Johannesburg, South Africa

## PROGRAMMING SKILLS

### Advanced:

Python • Matlab • C++

### Intermediate:

Keras • PyTorch •  $\text{\LaTeX}$  • Assembly

### Beginner:

Linux • SQL • Javascript • Julia

## GRADUATE COURSES

Probabilistic Machine Learning •  
Computer Vision • Speech Recognition •  
Weighted Automata • Deep Learning and  
Structured Data • Computational  
Neuroscience • Advanced Machine  
Learning • Reinforcement Learning and  
Decision Making • Machine Translation •  
Speech and Language Processing  
Applications

## EXPERIENCE

### OCADO TECHNOLOGY | MACHINE LEARNING ENGINEER

October 2019 - Present | Hatfield, United Kingdom

Part of the 10x team, where I am responsible for the development of novel machine  
learning and Natural Language Processing (NLP) projects.

### DEEP LEARNING INDABA | PRACTICAL TUTOR

Aug 2019 | Nairobi, Kenya

Tested and reviewed the practicals, assisted participants during practical sessions,  
and presented a poster on confidence scores for speech recognition.

### PERALEX ELECTRONICS | SOFTWARE DEVELOPMENT ENGINEER

Jan 2018 - August 2018 | Cape Town, South Africa

- Worked in an agile team environment to introduce deep learning approaches to  
replace existing passive radar detection systems
- Designed and implemented a number of signal detection systems using Keras
- Used Python for dataset management

### PERALEX ELECTRONICS | VACATION WORK

Nov 2016 - Jan 2017 | Cape Town, South Africa

- Made improvements in multirate filtering software which were accepted into  
the open source Julia DSP library.
- Wrote a program that checks C++ coding conventions
- Coded a Perl script for source code management

## AWARDS

- MIT Press poster award, Deep Learning Indaba (2019)
- University of Cambridge Department of Engineering Scholarship (2018)
- Dean's List (top 10% of my class) throughout undergraduate (2014-2017)
- Top mark in Software Development III (84%) (2017)
- 2<sup>nd</sup> place poster at the electrical engineering department open day (2017)
- **Top student in third year electrical engineering** (2016)
- Top mark in Probabilistic System and Signal Analysis (99%) (2016)
- International Scholar Laureate Program (ISPL) award (2015)
- Awarded Golden Key South Africa Membership (2014)

## CONFERENCES AND PUBLICATIONS

### PAPERS

- A. Kastanos, A. Ragni, M.J.F. Gales, "Confidence Estimation for Black Box  
Automatic Speech Recognition Systems Using Lattice Recurrent Neural  
Networks", arXiv:1910.11933 [eess.AS], Oct. 2019. (Under review)

### POSTERS

- A. Kastanos, A. Ragni, M.J.F. Gales, "Confidence Scores for Sequence Data,  
Presented at the Deep Learning Indaba 2019.

## SOCIAL GOOD PROJECTS

Proposed a computer vision based mapping tool, **Health AIM**, to predict areas with  
poor access to public health in Africa for the 2019 Geneva Challenge.