ATAS CERTIFICATE

Foreign & Commonwealth Office

Atas reference: 232933
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Issued On: 08/03/2019
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Full name: Mr IYALLA JOHN ALAMINA
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Nationality: Nigerian
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Passport expiry date: 05/02/2024
University name: University of Huddersfield

You applied for ATAS clearance on 15/02/2019 to study Doctorate INFORMATICS (CAH11-01-01) at University of Huddersfield.

You stated that your thesis, area of research, or the modules of your taught Postgraduate course would be:

"This thesis investigates the various limitations of Deep Neural Network (DNN) techniques when applied to low resource speech recognition. Various aspects of developing corpora for speech recognitions systems are explored. In particular various recurrent neural network (RNN) techniques were explored to implement acoustic Models (AM) , language model (LM) and the phonetic dictionary aspects of speech recognition. Long short term memory (LSTM) RNNs were used employed for the language model and the phonetic dictionary while bidirectional recurrent neural networks (bi-RNNs) were used to create end-to-end acoustic models/speech recognition systems.

Previous systems employed for low resource speech recognition involving deep networks included various knowledge transfer mechanisms including hybrid hidden markov models (HMM) to deep neural networks (HMM-DNN) models and those that are HMM alone-based include subspace Gaussian Mixture Models (GMMs). These models are based on the HMM generative model and N-gram language models. However, the model developed in this thesis makes use of an end-to-end discriminative model using the Bi-RNN acoustic/speech model augmented using an LSTM language model. The advantage of using bi-RNNs is that by focusing on end-to-end speech units as a one step process rather than a three-step process requiring an AM, LM and phonetic dictionary, it is possible build speech recognition systems with less resources i.e. with only aligned acoustic data. At the same time the inherent problems of speech recognition i.e. determining the relevant speech features required for accurate speech pattern recognition can be addressed by having a deep recurrent neural network at the heart of the speech recognition model which considers long term sequence relationships

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between acoustic sequences."

I am pleased to inform you that your ATAS application was successful.

All students from outside the EEA who wish to study in the UK for more than six months need to apply to UK Visas and Immigration before starting their course. If you are overseas you should now apply for a visa to undertake your studies. If you are already in the UK you will need to apply for further Leave to Remain. You can check the full requirement of the student category (also called Tier 4 of the Points Based System) at www.gov.uk/visas-immigration.

You will need to include this ATAS certificate with your other supporting documents when you make your application.

This certificate is only valid for the named student, University / Higher Education Institution and course stated above. It is valid for six months from the date of issue. However, if you wish to study at another University / Higher Education Institution, change your course / area of research or extend your course by more than three months, you will need to apply for another ATAS certificate. You can do this via the ATAS website https://www.academic-technology-approval.service.gov.uk.

You should be aware that submitting forged or fraudulently obtained documents, including a fake ATAS certificate, in support of a visa application is a serious offence. You may face a fine, prison and a ban of up to ten years on making a further visa application.

The ATAS Team.
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