

CHRISTY ELIAS

PYTHON DEVELOPER WITH AI AND ML EXPERIENCE

RESUME

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EDUCATION

MSc (by Research) Computer Science

2013 -2017

Trinity College Dublin, Ireland

School: School of Computer Science and Statistics

Thesis: Analysis of Speech Parameters as Indicators of Engagement in Conversation

(Minor corrections for the Thesis to be submitted)

My Research was focused on understanding the changes in the human interlocutor's speech in casual conversations. Used various methods in machine learning such as random forests, Support Vector Machines, K- Nearest Neighbors on extracted acoustic features extracted from speech samples.

MPhil (Interdisciplinary) Computational Linguistics

2011 -2012

University of Kerala, Thiruvananthapuram, Kerala, India

School: Department of Linguistics

Thesis: Spectral Processing based method for Automatic Segmentation of Malayalam Speech

(A Grade)

The course explored core concepts in Computational Linguistics and various tools for Natural Language Processing (NLP) were introduced. My research was on segmentation of Malayalam Speech using acoustic features, and emotion detection of Malayalam speech.

MSc Computer Science

2009 -2011

Mahatma Gandhi University, Kottayam, Kerala, India

School: School of Computer Sciences

Project: Configurable Logistics Management System (CGPA: 7.65)

The course explored advanced concepts in Computer Science and my electives were Artificial Intelligence and Fuzzy logic and Advanced Computer Hardware.

BSc Computer Science

2009 -2011

Mahatma Gandhi University, Kottayam, Kerala, India

School: Sree Sankara Vidyapeetom College, Perumbavoor, Kerala, India

Project: Smart Home System (Percentage: 71.65%)

The course covered basic topics in Computer Science including various programming languages.

EXPERIENCE

Python Developer

Sep 2018 - Present

Netsentries Infosec Solutions Pvt. Ltd., Kochi, Kerala, India

- Handled projects including custom features for Alerting systems, inhouse automated documentation system, Vulnerability Management portal, Phishing Tools, and Adversarial Simulation Tools.
- Designed architectures for all Netsentries products and internal tools.
- Ensured continuous implementation and delivery using Jenkins CI.
- SDLC - Acted as the lead developer managing onsite and offsite remote teams.
- Introduced pair programming, architectural patterns and code quality reviews to reduce tech debt.
- Presented product design to clients and ensured timely delivery.
- Managed a codebase using bitbucket and GIT.
- Mentored junior Python developers and trained them to work independently.

PROFILE

I'm Christy Elias! I am currently working as a Python developer. My primary area of interest is Artificial Intelligence especially, human computer interaction. My research during my MSc by research and MPhil were primarily focused on the analysis of acoustic analysis of speech parameters to identify interesting aspects of conversations. As a python developer I worked in projects in the information security domain such as log monitoring tool, customizations for Alerting Systems, Threat Management Portal etc.

I am looking for a position as a software developer / research engineer in the areas of artificial intelligence, machine learning, NLP / Speech Processing.

SKILLS

Machine Learning	<div><div></div></div>
AI	<div><div></div></div>
Data Science	<div><div></div></div>
Speech Processing	<div><div></div></div>
NLP	<div><div></div></div>
Python	<div><div></div></div>
Pytorch	<div><div></div></div>
Pandas	<div><div></div></div>
SQL	<div><div></div></div>
MATLAB	<div><div></div></div>
Communication	<div><div></div></div>
Motivation	<div><div></div></div>
Organization	<div><div></div></div>
Teamwork	<div><div></div></div>

CONTACT

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 www.twitter.com/eliaschristy1

 www.linkedin.com/in/christyeliass/

Remote Consultant (Voice Authentication) 11/07/2017 - 31/10/2017
Advanced Global Solutions S.p.A., Milan, Italy 01/01/2018 - 28/02/2018
Provided remote consultation for voice authentication project. Completed state of the art study of the biometric solutions from industry and academia. Identified suitable microphone for data collection for voice authentication. Identified suitable data for voice authentication analyses. Performed data augmentation with noise addition and feature extraction. Identified suitable Deep Learning algorithms for classification of voices.

Research Associate Feb 2013 – Aug 2013
Indian Institute of Information Technology and Management Kerala (IIITMK)
Thiruvananthapuram, Kerala, India

- Accomplished projects include Emotional Speech Processing for Malayalam and Unicode based text editor for Malayalam.
- Investigated phonetic typing strategies for Malayalam text input and Unicode conversion.
- Investigated the tolerance of statistical machine translation systems to noise in the training corpus, particularly the kind of noise that accompanies automatic extraction of parallel corpora from comparable corpora.
- Investigated paradigm-based approaches for Machine Translation.

RESEARCH PUBLICATIONS

- Emer Gilmartin, Marine Collery, Ketong Su, Yuyun Huang, **Christy Elias**, Benjamin R. Cowan, and Nick Campbell. 2017. **Social talk: making conversation with people and machine**. In Proceedings of the 1st ACM SIGCHI International Workshop on Investigating Social Interactions with Artificial Agents (ISIAA 2017). ACM, New York, NY, USA, pp31-32. doi>10.1145/3139491.3139494
<https://dl.acm.org/citation.cfm?doid=3139491.3139494>
- Emer Gilmartin, Ketong Su, Yuyun Huang, **Christy Elias**, Benjamin R Cowan, Nick Campbell. **Collecting a human-machine, human-human, and human-woz comparative social talk corpus.**, LREC MMC Workshop, Portoroz, Slovenia, 2016, pp39-41
<http://www.lrec-conf.org/proceedings/lrec2016/workshops/LREC2016Workshop-MCC-2016-proceedings.pdf>
- João P. Cabral, Yuyun Huang, **Christy Elias**, Ketong Su and Nick Campbell, **Interface for Monitoring of Engagement from Audio-Visual Cues**, The 1st Joint Conference on Facial Analysis, Animation, and Auditory-Visual Speech Processing, Vienna, Austria, Septmeber, ISCA, 2015, pp22 (Poster)
<https://docplayer.net/3419103-Faavsp-2015-the-1st-joint-conference-on-facial-analysis-animation-and-auditory-visual-speech-processing.html>
- **Christy Elias**, João P. Cabral and Nick Campbell, **Audio features for the Classification of Engagement**, Workshop on Engagement in Social Intelligent Virtual Agents, Delft, Netherlands, 25th August 2015, 2015, pp8-12
<https://esiva2015.files.wordpress.com/2015/09/proceedings-esiva2015.pdf>
- Yuyun, Huang, **Christy Elias**, João P. Cabral, Atul Nautiyal, Christian Saam and Nick Campbell, **Towards Classification of Engagement in Human Interaction with Talking Robots**, Communications in Computer and Information Science, 17th International Conference on Human-Computer Interaction, Los Angeles, USA, 2-7 August 2015, 528, Springer, 2015, pp741 – 746 (Poster)
https://link.springer.com/chapter/10.1007%2F978-3-319-21380-4_125
- **Christy Elias**, Arun Kumar K.R., **Analysis of Blind Automatic Speech Segmentation Methods**, National Seminar on Speech Synthesis and its Applications, University of Kerala, Kerala, India, July 2012
- **Christy Elias**, Arun Kumar K.R., **Analysis of Automatic Speech Segmentation Methods and Their Application in Malayalam**, 40th All India Conference of Dravidian Linguists, University of Hyderabad, India, June 2012

LANGUAGE

Malayalam 
English 
Hindi 

TRAINING

4th Lisbon Machine Learning School

22/07/2014 - 29/07/2014

Instituto Superior Técnico, Lisbon, Portugal

The summer school covered a range of machine learning (ML) Topics, from theory to practice, that are important in solving natural language processing (NLP) problems that arise in the analysis and use of Web data.

PART-TIME JOBS

Growth Engineer 27/04/2017
- 29/11/2017

Vista Career Solutions, Ireland

Associate Growth Engineer 02/01/2017
- 24/04/2017

Global Nurses Connect, Ireland

Lab Demonstrator 2013 - 2016
School of Computer Science and Statistics,
Trinity College Dublin, Ireland

Examination Invigilator 22/07/2014
- 29/07/2014

Trinity College Dublin, Ireland

Guest Lecturer 22/07/2014
- 29/07/2014
School of Technology and Applied Sciences,
Ernakulam, India

INTERESTS

Painting
Cycling
DIY
Robotics
Movies

REFERENCE

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