

SHRIKANTH CHERLA

PERSONAL INFORMATION

website <https://cherla.org>
email cherla.srikanth@gmail.com
linkedin <https://www.linkedin.com/in/srikanth-cherla>
phone (M) +46 735166693

WORK EXPERIENCE

- Unity Technologies*
(Copenhagen)
Nov 20- Senior Machine Learning Developer
Working closely with Game Designers in a research (Unity Labs) project to identify scenarios where their workflow could benefit from the introduction of AI- and ML-driven tools, and developing prototypes of the same.
Reference: Mikko LEHTINEN · mikkol@unity3d.com
- Moodagent A/S*
(Copenhagen)
Jul 19-Oct 20 Senior Research Scientist
Building and maintaining the (Python-based) recommender technology underlying the Moodagent music streaming app, cleaning and preparing data for the same, leading the adoption of software development best practices.
Reference: Mikael HENDERSON · mah@moodagent.com
- Jukedeck Ltd.*
(London)
Jan 16-Mar 19 Machine Learning Researcher
Developing, improving and evaluating recurrent neural network architectures in Python for automatic generation of music given style and mood. Devising ways to evaluate the quality of AI-generated music.
Reference: Ed NEWTON-REX · ed.newton-rex@bytedance.com
- Simon Fraser University*
(Vancouver)
Oct 11-Jul 12 Research Assistant
Developing digital waveguide synthesis models in Matlab for wind instruments. Measuring impulse responses of the said instruments. Communicating findings and results to collaborator (a Jazz saxophonist).
Reference: Dr. Tamara SMYTH · tamaras@ucsd.edu
- PMC Technologies*
(Barcelona)
Jan 11-Apr 11 Intern
Experiments with support vector regression models using Weka on machine-state data for early fault detection in manufacturing machinery in the semi-conductor industry.
Reference: Dr. Hendrik PURWINS · hpurwins@gmail.com
- Siemens Corporate Technology*
(Bangalore)
Jul 07-Jul 10 Research Engineer
Developing systems for Human Action Recognition and Auditory Scene Analysis in C and Matlab using Dynamic Programming over extracted features. Implementing Video stitching and image segmentation algorithms.
Reference: Dr. Amit KALE · amitmeister@gmail.com

EDUCATION

- 2012-2016 Doctor of Philosophy
City, University of London (London)
Music Informatics · Department of Computer Science
Thesis: *Connectionist Models for Classification and Sequence Learning*
Description: Key contributions of this work include a comparative evaluation of connectionist and n -gram melody models, a novel sequence labelling model

and extensions to a class of models known as Boltzmann Machines.

Advisors: Dr. Artur GARCEZ · a.garcez@city.ac.uk

Dr. Tillman WEYDE · t.e.veyde@city.ac.uk

2010-2011 Master of Science

Universitat
Pompeu Fabra
(Barcelona)

GPA: 9.24 · *Sound and Music Computing* · Music Technology Group

Thesis: ***Automatic Phrase Continuation in Guitar and Bass-Guitar Melodies***

Description: A system for note extraction using onset and pitch detection algorithms, followed by sequence learning using variable order Markov models to generate stylistically similar continuations of audio melodies.

Advisor: Dr. Hendrik PURWINS · hpu@create.aau.dk

2003-2007 Bachelor of Technology

International
Institute of
Information
Technology
(Hyderabad)

GPA: 6.96 · *Computer Science & Engineering* · Centre for Visual IT

Final Project: ***Real-Time Camera Based Traffic Violation Detection System***

Description: A system to detect common traffic-rule violations (wrong-side driving, speeding, etc.) that occurred at a junction near the university entrance using computer vision algorithms and simple heuristics.

Advisor: Dr. C. V. JAWAHAR · jawahar@iiit.ac.in

KEY PUBLICATIONS

- 2018 G. Medeot, S. Cherla, K. Kosta, M. McVicar, S. Abdallah, M. Selvi, E. Newton-Rex and K. Webster, **“StructureNet: Inducing Structure in Generated Melodies”**, in *Proc. 19th International Society for Music Information Retrieval Conference*, (Paris, France).
- 2017 S. Cherla, S. Tran, T. Weyde, A. Garcez, **“Generalising the Discriminative Restricted Boltzmann Machine”**, in *Proc. 19th International Conference on Artificial Neural Networks*, (Alghero, Italy).
- 2015 S. Cherla, S. Tran, A. d’Avila Garcez and T. Weyde, **“Discriminative Learning and Inference in the Recurrent Temporal RBM for Melody Modelling”**, in *Proc. International Joint Conference on Neural Networks*, (Killarney, Ireland).
- 2013 S. Cherla, T. Weyde, A. d’Avila Garcez and M. Pearce, **“A Distributed Model for Multiple-viewpoint Melodic Prediction”**, in *Proc. 14th International Society for Music Information Retrieval Conference*, pp. 15-20 (Curitiba, Brazil).
- 2008 S. Cherla, K. Kulkarni, A. Kale and V. Ramasubramanian, **“Towards Fast, View-Invariant Human Action Recognition”**, in *Proc. Computer Vision and Pattern Recognition Workshops (CVPRW)*, pp. 1-8 (Anchorage, USA).

Complete list: <https://cherla.org/publications.html>

TECHNICAL SKILLS

Operating Systems	Debian/Ubuntu Linux
Languages	PYTHON, BASH, MATLAB/GNU OCTAVE, L ^A T _E X, HTML, SED, AWK, TYPESCRIPT, C#
Libraries & APIs	TENSORFLOW, PYSARK, THEANO, SCIKIT-LEARN, SCIPY, NUMPY, MATPLOTLIB/SEABORN, AWS
Programming Tools	VI/VIM, TMUX, GIT

OTHER INFORMATION

- Awards
- 2013 · Best Student Paper (Int’l Society for Music Information Retrieval)
- 2013 · Best Poster Presentation (City Post-graduate Research Symposium)
- 2007 · Recognition for promoting cultural activities at the IIIT - Hyderabad

Scholarships

2012-2015 · 100% Fee Waiver & PhD Studentship (City University London)
2010-2011 · 75% Fee Waiver (Universitat Pompeu Fabra)
2003-2007 · 25% Fee Waiver (Pratibha Scholarship, Govt. of Andhra Pradesh)

Research Interests

MACHINE LEARNING · DEEP LEARNING · GENERATIVE MACHINE LEARNING ·
DATA VISUALISATION · AI FOR CREATIVITY

May 3, 2022