Imanol Schlag

CONTACT INFORMATION

IDSIA: The Swiss AI Lab
Galleria 2 - Room 224
Via Cantonale 2, 6928 Manno, Switzerland

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www: ischlag.github.io

RESEARCH INTERESTS

Machine Learning and Artificial Neural Networks for Artificial Intelligence. I'm specifically interested in systematic generalisation and learning structured representations from an environment or data with a large complexity due to a combinatorial explosion. My current work focuses on Fast Weights, a type of Recurrent Neural Network that learns to reason from examples.

CURRENT ACADEMIC APPOINTMENTS

Doctoral Assistant, IDSIA - The Swiss AI Lab **September 2016 to present**
Istituto Dalle Molle di Studi sull'Intelligenza Artificiale
Università della Svizzera italiana
Faculty of Informatics

EDUCATION

Università della Svizzera italiana, Lugano, Switzerland

PhD, Artificial Intelligence and Machine Learning, candidate

- Adviser: Professor Jürgen Schmidhuber
- Area of Study: Deep Learning

University of St Andrews, St Andrews, Scotland

MSc, Artificial Intelligence, August 2016

- *With Distinction*
- Thesis Topic: *Face Recognition from Ancient Roman Coins*
- Adviser: Professor Ognjen Arandjelović
- Area of Study: Deep Learning

University of Applied Sciences and Arts Northwestern Switzerland, Brugg, Switzerland

BSc, Computer Science, August 2015

- With specialisation in Information Processing and Visualization
- Thesis Topic: *Face Similarity - Finding Lookalikes from Images*

Swiss Armed Forces Special Forces Training Center, Isone, Switzerland

Sergeant, Swiss Commando Special Forces, August 2011

- Recruit and non-commissioned officer school
- Trained instructor and squad leader

PUBLICATIONS

[1] I. Schlag and J. Schmidhuber. Gated Fast Weights for On-The-Fly Neural Program Generation. Neural Information Processing Systems, 2017. Workshop on Meta-Learning.

[2] I. Schlag and O. Arandjelovic. Ancient Roman Coin Recognition in the Wild Using Deep Learning Based Recognition of Artistically Depicted Face Profiles. In Proc. IEEE Conference on Computer Vision and Pattern Recognition, 2017.

TEACHING EXPERIENCE

Università della Svizzera italiana, Lugano, Switzerland

Teaching Assistant **September 2017 to March 2018**

- Assisted Machine Learning and Deep Learning Lab.
- Held weekly tutorials of roughly 90 minutes each
- Developed and graded exams, as well as, monthly assignments

Swiss Armed Forces, Grenadier-Battalion 30/2, Isone, Switzerland

Military Instructor **2011 to 2019**

- Yearly 4 week repetition course

Professional Experience

Basler Kantonalbank, Basel, Switzerland

Apprentice in Informatics **September 2006 to June 2010**

Awards

University of St Andrews

- Medal for the best dissertation in Computer Science, 2016

References Available to Contact

Dr. Jürgen Schmidhuber (e-mail: juergen@idsia.ch; phone: +41 58 666 666 2)

- Scientific Director of IDSIA
- Professor of AI at USI
  - ◇ IDSIA, Galleria 2, 6928 Manno-Lugano, Switzerland
  - ⋆ *Dr. Schmidhuber is my current doctoral supervisor.*

Dr. Ognjen Arandjelović (e-mail: ognjen.arandjelovic@gmail.com)

- Professor at the University of St Andrews, School of Computer Science
  - ◇ School of Computer Science, University of St Andrews, St Andrews, KY16 9SX Fife, Scotland
  - ⋆ *Dr. Arandjelović was my MSc thesis supervisor*

Dr. Manfred Vogel (e-mail: manfred.vogel@fhnw.ch; phone: +41 56 202 77 36)

- Professor, Head of degree programme Master of Science in Engineering at the FHNW, Director of the Institute of Data Science at the FHNW
  - ◇ Fachhochschule Nordwestschweiz FHNW, Hochschule für Technik, Bahnhofstrasse 6, CH-5210 Windisch
  - ⋆ *Dr. Vogel was my BSc thesis supervisor*