

Liam Schoneveld

EDUCATION	Master of Science (Artificial Intelligence) The University of Amsterdam <i>Graduated Cum Laude</i>	2015-2017
	Bachelor of Commerce (Liberal Studies) The University of Sydney <i>Majors in Economics and Econometrics</i>	2009-2013
PROFESSIONAL EXPERIENCE	Lead Data Scientist, Powder	Oct 2019-Present
	Lead and implement the AI strategy at Powder:	
	<ul style="list-style-type: none">• Research and develop Powder's videogame highlights detection system, which is highly scalable thanks to a unique (patent pending) approach applying self- and weakly-supervised learning to 1000s of hours of videogame footage.• Active role in recruiting and onboarding new AI talent, communicating needs and results to management, and explaining Powder's AI strategy to investors.• Lead Powder's research collaboration with Dr. Alice Othmani at Université Paris-Est Créteil (UPEC), focusing on audiovisual emotion recognition.	
	Data Scientist, Pandascore	2017-2019
	<ul style="list-style-type: none">• Developing and deploying computer vision models for real-time events and stats detection in e-sports (professional video games) tournaments.• Training and deploying machine learning models using these computer vision-derived data to predict match outcomes in real time.• Contributing to growth, product strategy and recruitment efforts.	
	Machine Learning Specialist, Scyfer (acquired by Qualcomm)	Feb-Sep 2017
	Completed my Artificial Intelligence (AI) masters' thesis under the supervision of Taco Cohen and Max Welling while interning at Scyfer, an AI consultancy acquired by Qualcomm in late 2017. Focus was on researching and developing semi-supervised deep learning techniques, with an emphasis on computer vision.	
	Econometrics Contractor, LEK Consulting	2016-2017
	Contracted to develop econometric revenue analysis and forecasting models for several assets belonging to a large (ASX top 50) Australian client of LEK.	
	Economics Consultant, PricewaterhouseCoopers Australia	2013-2016
	Consulted with clients primarily from the transport industry. Focus was on econometric and economic modelling (e.g. demand forecasting, cost-benefit analyses, project appraisal, etc.) and associated analysis and reporting.	
	Software Developer, Law in Order Pty Ltd	2010-2013
	Produced electronic databases of legal evidence for Law in Order's clients. Proposed, developed and maintained a quality assurance software tool that continued to be used at Law in Order many years after my departure.	

PUBLICATIONS

Schoneveld, L., Othmani, A. & Abdelkawy, H. *Leveraging Recent Advances in Deep Learning for Audio-Visual Emotion Recognition*. Pattern Recognition Letters (2021).

Schoneveld, L. & Othmani A. *Towards a General Deep Feature Extractor for Facial Expression Recognition*. 28th IEEE International Conference on Image Processing (IEEE - ICIP) (2021).

OTHER ACHIEVEMENTS

- Ongoing: Maintain a blog with posts on machine learning at nlml.github.io
- Ongoing: Contribute to open source projects on GitHub - e.g. Pytorch, mlflow
- Ongoing: Answer questions on StackOverflow, see: stackoverflow.com/u/6167850 & stats.stackexchange.com/users/112095
- 2018: Presented at Meetup Computer Vision Paris, presentation titled: *Tracking Player Positions on the League of Legends Minimap*
- 2018: Participated in the 2018 Amsterdam Dance Event Hackathon (worked in a team to build a deep learning-based reverse image search application)
- 2018: Participated in the Kaggle TensorFlow Speech Recognition Challenge
- 2017: Graduated *Cum Laude* from the MSc Artificial Intelligence program at the University of Amsterdam
- 2017: Received an 8/10 for my MSc AI thesis: *Semi-Supervised Learning with GANs*, supervised by Prof. Dr. Max Welling and Taco S. Cohen
- 2016: Placed 1st out of 50 student groups in a Kaggle-style machine learning competition as part of the UvA/VU course *Data Mining Techniques*
- 2015: Placed 17th out of 985 participants in Kaggle's *Facebook Recruiting IV: Human or Robot?* data science competition
- 2013: Placed 2nd out of 108 students in the *Operations Management* course at the University of Sydney
- 2010: Awarded two separate International Exchange Scholarships by the University of Sydney, based on academic merit
- 2008: Placed 7th of 2730 students in Higher School Certificate course *Software Design and Development*.

SKILLS AND STRENGTHS

General skills:

- Broad knowledge in fields relating to machine learning, statistics, computer science and economics, obtained both academically and professionally
- Writing skills; able to concisely convey ideas to diverse audiences
- Communication ability; thrive in a team environment.

Programming languages/software experience:

- Python data science / ML stack (numpy, sklearn, pandas, matplotlib, etc.)
- Deep learning libraries (Pytorch, Tensorflow, Keras, Theano)
- MLops, ML pipeline reproducibility, ML model deployment to multiple frameworks (Apple coreml, tflite, tools like dvc, Docker)
- Strong experience with Unix/Linux, databases (namely PostgreSQL), Git, R, VBA, Matlab, \LaTeX , Microsoft Office
- Experience with Java, C++, HTML, CSS, JavaScript, Julia.