William **Trouleau**

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French citizen Swiss C Permit Born 28.03.1991

KEY COMPETENCES: Machine Learning • Probabilistic Modeling • Data Mining

EDUCATION

2015 – ongoing Ph.D. in Machine Learning

(Estimated June 2021) École Polytechnique Fédérale de Lausanne (EPFL)

- o Information & Network Dynamics Lab (INDY), under the supervision of Prof. Matthias Grossglauser and Prof. Patrick Thiran
- o Focusing on the statistical and algorithmic aspects of **modeling**, **control** and **inference** of **networks** of **times series**; with applications to epidemiology, information diffusion and recommendation systems

2009 – 2015 B.Sc. and M.Sc. in Communication Systems

École Polytechnique Fédérale de Lausanne (EPFL)

o Master thesis on user behavior modeling in video-on-demand services, supervised by Azin Ashkan and Matthias Grossglauser (published at KDD 2016)

PROFESSIONAL EXPERIENCE

2019 Institute for Disease Modeling (Seattle, USA) - Research Intern

(3 months) o Participated in the 2019 KIT Tuberculosis (TB) Hackathon to quantify the TB burden in Pakistan

- o Took care of data collection, data cleaning, model design and performance evaluation for our team
- o Won the competition (out of 9 teams)

2014 – 2015 Technicolor (Los Altos, CA, USA) – Research Intern

(10 months) o Designed a novel generative mixture model that presents a first-of-its-kind characterization of viewer behavior on video-on-demand services.

2013 Technicolor (Paris, France) - Research Intern

(3 months) o Designed a hierarchical topic model with Monte Carlo Markov Chain inference for legal document classification and exploratory analysis of patent portfolios

SKILLS

Data Science Machine Learning, Optimization, Probabilistic Modeling, Applied Data Analysis, Information Theory,

Statistical Signal Processing

Programming Python, Spark, R, Matlab, Bash, Java, SQL/NoSQL, HTML/CSS, LaTeX

LANGUAGES AND MISCELLANEA

Languages o French: Native language

o **English:** Fluent, written and spoken

Services o Reviewer for ICML, NeurIPS, and AISTATS

o Study advisor for new EPFL Master students

HONORS AND AWARDS

- 2020 In Top 33% of Reviewers, ICML'20
- 2019 Hackathon Winner, 2019 Hack TB, KIT
- 2019 Teaching Assistant Award, EPFL
- 2016 Student Travel Award, ACM SIGKDD
- 2015 EDIC Fellowship, EPFL

SELECTED PUBLICATIONS

- 2021 A Variational Inference Approach to Learning Multivariate Wold Processes
 - J. Etesami*, W. Trouleau*, N. Kiyavash, M. Grossglauser, P. Thiran. AISTATS 2021.
- 2020 Quantifying the Effects of Contact Tracing, Testing, and Containment Measures in the Presence of Infection Hotspots.
 - L. Lorch, H. Kremer, W. Trouleau, S. Tsirtsis, A. Szanto, B. Schölkopf, M. Gomez-Rodriguez. Preprint.
- 2019 Learning Hawkes Processes Under Synchronization Noise
 - W. Trouleau, J. Etesami, M. Grossglauser, N. Kiyavash, P. Thiran. ICML 2019.
- 2019 Learning Hawkes Processes from a Handful of Events
 - F. Salehi*, W. Trouleau*, M. Grossglauser, P. Thiran. NeurlPS 2019.
- 2018 Stochastic Optimal Control of Epidemic Processes in Networks
 - L. Lorch, A. De, S. Bhatt, W. Trouleau, U. Upadhyay, M. Gomez-Rodriguez. Machine Learning for Health Workshop at NeurIPS, 2018. **ML4H 2018**.
- Prev. chemotherapy to control soil-transmitted helminthiasis averted more than 500'000 DALYs in 2015

 A. Montresor, W. Trouleau, D. Mupfasoni, M. Bangert, S.A. Joseph, A. Mikhailov, C. Fitzpatrick.

 Transactions of The Royal Society of Tropical Medicine and Hygiene, 2017.
- 2016 Just one more: Modeling binge watching behavior
 - W Trouleau, A Ashkan, W Ding, B Eriksson. KDD 2016.

* Equal contribution