

# PAUL JEHA

MEINUNGSGADE 12 2TH, COPENHAGEN, DENMARK | +45 30 45 31 48 |  
pauje@dtu.dk | linkedin.com/in/pauljeha | Dual Nationality: French – Canadian |

## EDUCATION

### DTU – Technical University of Denmark

*PhD – Itô's formula as a learnable bridge between two Stochastic Differential Equations.*

Sep '22 to Sep '25  
Copenhagen, Denmark

### Ecole Polytechnique Fédérale de Lausanne, EPFL

*Double Degree: MSc Management, Technology and Entrepreneurship, Minor in Data Science*

Sep '18 to Oct '20  
Lausanne, Switzerland

- *Relevant coursework:* Machine Learning, Optimization for Machine Learning, Deep Learning, Advanced Convex Optimization, Statistics for Data Science.

### CentraleSupélec

*MSc in Electrical Engineering*

Sep '16 to Oct '20  
Paris, France

- *Relevant coursework:* Probability & Statistics, Signal Analysis, Big Data, Software Engineering, Algorithms and Data Structures.

### Chaptal Preparatory classes

Sep '13 to Jul '16  
Paris, France

- *Relevant coursework:* Mathematics, Physics, Engineering Science. “French Grandes Ecoles”.

## WORK EXPERIENCE

### DTU – Technical University of Denmark

*Research assistant*

Jan '22 to Aug '22  
Copenhagen,  
Denmark

- Research in diffusion models and Stochastic Differential Equations

### Amazon Web Services

*Applied Scientist Intern*

Nov '20 to Nov '21  
Berlin, Germany

- One-year long research position in generative models and time series.

### Siemens Healthineers

*Research Intern*

March '20 to Sep '20  
Princeton, US

- Master Thesis awarded with the highest grade: Research in Super Resolution of X-Ray images using Generative Adversarial Networks.

### ZAION.ai

*Data Scientist Intern*

Jun '18 to Aug '18  
Paris, France

- Research and implementation an algorithm that segments an audio signal into spoken and non-spoken segments using k-Nearest Neighbours.

## PUBLICATIONS

### Variance reduction of diffusion model's gradients with Taylor approximation-based control variate

Jeha Paul, Will Grathwohl, Michael Riis Andersen, Carl Henrik Ek, Jes Frellsen

- Published at ICML 2024 Workshop on Structured Probabilistic Inference & Generative Modeling

### PSA-GAN: Progressive Self Attention GAN for Synthetic Time Series

Jeha Paul\*, Bohlke-Schneider Michael\*, Mercado Pedro, Singh Nirwan Rajbir, Kapoor Shubham, Flunkert Valentin, Gasthaus Jan, Januschowski Tim

- Published at Time Series workshop ICML 21 with a contributed talk. Top 4 papers.
- Published at ICLR 22 Conference

## ACADEMIC PROJECTS

### Master thesis: Single Image Super Resolution of X-Ray Images

Mar '19 to Jun '19  
Lausanne, Switzerland

- Developed a generative model to achieve super resolution of X-Ray images. Focused on (i) realistic images with complex patterns, (ii) similar to the ground truth image and (iii) perceptual quality.

## ENTREPREUNERSHIP

---

### **Junior Supelec Stratégie (now Junior CentraleSupelec)**

*Project and Quality manager*

Sep '16 to Jul '18  
Paris, France

- Negotiated and piloted web development projects for Syrian law professionals, in order to prepare post-conflict Syria.

### SKILLS

---

- Technical skills: Python (PyTorch, Scikit Learn, Pandas, JAX etc.), AWS SageMaker, VM Google Cloud, InDesign
- Languages: Native French, fluent English, intermediate Arabic, basic Spanish
- Passions: Calisthenics, Fashion (designing and sewing clothes), Coffee (natural anaerobic process is my favourite), Food and Reading (currently Poor Things)