

# Eyal Benaroche

## ML Engineer - End of Study Internship

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GitHub shaamallow.com

eyal-benaroche

### EDUCATION

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#### Ecole Polytechnique, Engineering school

Palaiseau, France

*Engineering Degree; Outstanding Investment Award*

2021 – 2025

Major in Computer Science, Computer Vision

- **Courses:** Machine & Deep Learning, Analysis of shapes, Digital Representation of Shapes, Advanced Deep Learning, Advanced Machine Learning and Autonomous Agents, Text Mining and NLP, Real-time AI in video games, IoT, Visualization, Conception of Algorithms, Markov Chains...

#### Mines Paris - PSL

Paris, France

*Engineering Degree*

2024 – 2025

Major in Computer Science, Optimization for Machine Learning

#### Lycée Hoche, Classe Préparatoire

Versailles, France

*PCSI - PSI*

2019 – 2021

Post-secondary 2-year study which acts as an intensive preparatory course training students for enrolment in one of the top-level engineering schools in France

### EXPERIENCE

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#### Clipdrop by Jasper

Paris, France

*Research Scientist Intern*

April 2024 – Sep 2024

- Trained different Image Adapter models of various size based on different embedders (Dino-V2, StyleShot, Clip-H,L...) for image conditioning in diffusion models in stylization task
- Incorporated inversion techniques with adapters to improve the style matching with a demo available at <https://huggingface.co/spaces/jasperai/inversion-instantstyle>
- Contributed to FlashDiffusion Paper (distillation for acceleration of diffusion models) [arXiv:2406.02347](https://arxiv.org/abs/2406.02347)
- Published demo about LoRAs compatibility for distilled student model without retraining (FlashDiffusion)
- Developed a unified benchmarking tool to evaluate the styling capabilities of different training-free diffusion models available at <https://gojasper.github.io/style-rank-project/>

#### Fujitsu Limited

Tokyo, Japan

*Research Scientist Intern*

Jun 2023 – Sep 2023

- AI Research in object detection and data augmentation, improve logo detection technique using synthetic dataset made with diffusion model and deterministic algorithm constraints. Explore Controllability of diffusion models.

#### Computer Science Council

Ecole Polytechnique, France

*System Administrator & Treasurer*

Nov 2022 – Dec 2023

- Provided services (Gitlab, Nextcloud, cloud computing, etc.) to the student body through the [Binet Réseau](#).
- Continuous Integration setup for homemade social network
- Manage over 70 VMs/30 servers with Proxmox Hypervisor and SaltStack

#### Cours Eric Tabarly, Esperance Banlieues

Toulon, France

*Teacher*

Oct 2021 – Apr 2022

- Worked for children coming from tough neighborhood and with multiple liabilities (from dyslexia to drugs) and improved the school's IT infrastructure

### SKILLS

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**Computer:** PyTorch, OpenCV, FastAPI, Linux, blender, C++, Svelte, Git, slurm, Docker, d3-js, TypeScript, Haskell, Lua, SQL

**Languages:** French (Native), English (111 TOEFL), Spanish (Intermediate), Japanese (Beginner)

### HOBBIES

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Volleyball 🎵 Electronic Music 🎨 Drawing 🎮 Video Games 🖥️ Self-Hosting