

Davide Nale

  |  [davidenale](#) |  [DavideNale](#) |

Education

Master of Science, ICT for Internet and Multimedia

 *Università degli Studi di Padova*

Oct 2021 – Oct 2023

Padova, Italy

- Grade: 110/110 with honors
- Thesis: "Neural Implicit Representation for Spatial Audio Coding"

Bachelor of Science, Information Engineering

 *Università degli Studi di Padova*

Sep 2018 – Sep 2021

Padova, Italy

- Grade: 105/110
- Thesis: "Intelligent Reflective Surfaces: A Technology for Energy Saving in Wireless Communications"

Career

Machine Learning & DevOps Engineer

 *IBC*

Oct 2023 – Present

Remote, Milan, Italy

- Architected and deployed large-scale AI models for tax document processing using Pytorch. Implemented containerized deployments on AWS and Azure with Docker and Kubernetes, automated via Github Action.
- Developed and implemented an industrial anomaly detection system, minimizing false positives and improving early fault detection.
- Engineered critical network infrastructure and internal tools using Go.
- Led a 4-person team in developing a GPT-integrated AI application, deployed serverless with AWS Lambda, optimizing for high request volumes while significantly reducing operational costs.
- Designed and implemented RAG-based systems with Milvus vector database, improving query resolution speed and achieving sub-second query times on million-entry datasets.

Researcher @ LTTM

 *Università degli Studi di Padova, Information Engineering Dep.*


Mar 2023 – Sep 2023






Padova, Italy






- Performed research on NeRF (Neural Radiance Fields) networks for spatial audio coding, developing a novel architecture for implicit representation of audio
- Engineered a new model suitable for embedding in real-time applications







Competencies





 **Human Languages:** Italian ★★★★★, English ★★★★★, Spanish ★★★☆


 **Primary Languages:**  Python,  Go,  Rust

 **Cloud:**  AWS,  Azure,  Kubernetes,  Linux

 **DevOps:**  Terraform,  GitLab CI,  GitHub Actions,  Docker

 **Data:**  Grafana,  GraphQL,  SQL,  NoSQL,  Redis

 **AI:**  Pytorch,  Huggingface,  Transformers,  Opencv

 **Creative:**  Blender,  Figma,  Unity