Iordan Iordanov

RESEARCH SCIENTIST

Profile

I have a PhD in Computational Geometry and more than a decade of experience across research and applied ML/CV engineering. On the ML side, I have led and directly contributed to computer vision deep learning projects (depth estimation, pose estimation, object detection, optical flow, and self-supervised learning) delivering over 50 client-facing projects, including four funded collaborations with AIST on Quality Assurance for AI. On the research side, my PhD work on periodic Delaunay triangulations of hyperbolic surfaces is integrated into CGAL, the largest open-source library for computational geometry. I have also held senior leadership roles, scaling an engineering team from 10 to 70 and building internal research capability from scratch.

I am currently based in Tokyo but my family and I are looking for the right opportunity to relocate to Europe for education and lifestyle reasons. I am fluent in English, French, Italian, Greek, Bulgarian, and I can hold a basic conversation in Japanese.

Employment

Researcher, Braid Technologies, Tokyo, Japan

SEPTEMBER 2025 — PRESENT

- R&D on geometry processing and design automation for manufacturing applications.
- Design and implement algorithms for 3D mesh processing, including CGAL-based remeshing with feature preservation.
- Build internal tooling for a more robust and reproducible geometry processing pipeline.

Stack: *C++, Python, CGAL, VTK, PyVista, libigl, Eigen.*

Chief Scientist → CTO / Director, Corpy&Co., Inc., Tokyo, Japan

JULY 2019 — JULY 2025

- Technical R&D across 50+ client projects in manufacturing, automotive, and industrial AI.
- Computer vision deep learning: depth estimation, pose estimation, object detection, optical flow.
- Four funded AIST collaborations on AI Quality Management Guidelines: autonomous driving CV, autoencoder anomaly detection, fairness in financial risk analysis, and LLM quality assurance.
- Built an Explainable AI platform, including model quantization for edge deployment.
- Progressed to CTO, scaling the engineering organization from 10 to 70; introduced OKRs and built internal research hiring pipelines.

Stack: *Python, PyTorch, NumPy, HTML, JavaScript, MySQL, Docker, Celery.*

R&D Engineer, Gamestream, Ludres, France

JANUARY 2019 — JUNE 2019

- Low-latency video game streaming client for Samsung TVs; researched neural network-based frame upscaling.

Stack: *C++, OpenGL, proprietary SDK.*

Details

Tokyo, Japan
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Links

Personal Website
LinkedIn
Github

Skills

ML / CV

PyTorch
Computer vision
Self-supervised learning
Model quantization
Edge deployment
MLOps · GANs

Geometry

Computational geometry
CGAL · libigl · VTK · FreeCAD
Mesh processing

Programming

C++ · Python
PyVista · Eigen · NumPy
Docker · SQL · Web

Other

Algorithm design
Project management
Research delivery

Languages

English	Fluent
Italian	Fluent
French	Advanced
Greek	Native
Bulgarian	Native
Japanese	Basic

Ph.D. Candidate, LORIA, Nancy, France

JANUARY 2016 — DECEMBER 2018

- Algorithm for periodic Delaunay triangulations of the Bolza surface; integrated into the CGAL library.

Stack: *C++, CGAL.*

Graduate Research Assistant, Foundation for Research and Technology - Hellas (FORTH), Heraklion, Greece

DECEMBER 2014 — OCTOBER 2015

- Geometry-based method for tracking morphological changes in abdominal aortic aneurysms; peer-reviewed publication (doi).

Stack: *Python, C++, VMTK.*

Education

Ph.D. in Computer Science, Unversité de Lorraine, Nancy, France

JANUARY 2016 — DECEMBER 2018

Thesis: Delaunay triangulations of a family of symmetric hyperbolic surfaces in practice. The work is part of the CGAL library.

M.Sc. in Applied Mathematics, University of Crete, Heraklion, Greece

SEPTEMBER 2014 — DECEMBER 2015

Thesis: Shape-Preserving Interpolation on the Sphere.

B.Sc. in Applied Mathematics, University of Crete, Heraklion, Greece

SEPTEMBER 2005 — MARCH 2013

Thesis: The Euclidean InSphere Predicate.

Publications

5. N. Ishikura, D. Kondo, I. Iordanov, V. Vassiliades, H. Tode. **Cache-Property-Aware Features for DNS Tunneling Detection**. *ICIN, Paris, 2020.* [doi]

4. M. Ebbens, I. Iordanov, M. Teillaud, G. Vegter. **Systole of regular hyperbolic surfaces with an application to Delaunay triangulations**. *Curves & Surfaces, Arcachon, 2018.* [hal]

3. M. Ebbens, I. Iordanov, M. Teillaud, G. Vegter. **Delaunay triangulations of regular hyperbolic surfaces.** *Curves & Surfaces, Arcachon, 2018.* [hal]

2. I. Iordanov, M. Teillaud. **Implementing Delaunay triangulations of the Bolza surface.** *SoCG, pp. 44:1–44:15, 2017.* [doi]

1. E. Metaxa, I. Iordanov, E. Maravelakis, Y. Papaharilaou. **A novel approach for local abdominal aortic aneurysm growth quantification.** *Medical & Biological Engineering & Computing, 2016.* [doi]