— Education

2014-2019
United States
USC, University of Southern California, Viterbi School of Engineering
Ph.D in Civil and Environmental Engineering

2011-2012
Switzerland
ETH Zurich, Chair for Computer Aided Architectural Design, prof. L. Hovestadt.
Advanced Master of Science (MAS) in CAAD (Computer Aided Arch. Design)

2003-2010
Greece
AUTH, Aristotle's University of Thessaloniki, Department of Architecture & Engineering
Master of Science in Architectural Design and Engineering.

2007-2008
Austria
TU Wien Technical University of Vienna, Department of Architecture
Socrates Erasmus student for two semesters.

2004-2007
Greece
MOKUME Jewelry Institute , Department of handmade jewelry.
Diploma in hand made jewelry (design and manufacturing)

— Research Experience

Sept. 2014-2018
Research Assistant, School of Architecture ,University of Southern California (USC)
-Research on Multi Agent Design Systems for performance based design: focus on the combination of generative design techniques with numerical analyses and simulations (i.e. environmental and structural)
-ARCH590- Arch. Directed research: Tutorials for Master Students on Form Finding

Summer. 2014
Researcher, IDEA Studio Scholar, Autodesk
-Research on the integration of occupant light preferences collected via Immersive Virtual Environments for informing the generative design of façade panel on office buildings.

Spring. 2013
Helping Assistant, Chair of Structural Mechanics, Institute of Structural Engineering, Prof E. Chatzi, ETH Zurich
-Conducted preliminary research on Functionally Graded Material for prof. E. Chatzi.
-Assisted undergraduate civil engineering student in generating and preparing 3d geometries of structural alternatives for the Zurich Zoo canopy

Spring-Fall. 2012
Chair for Computer Aided Architectural Design (CAAD),ETH Zurich
-Assisted the development of materiability.com led by Kretzer M,
-Fabricated samples from smart materials (Electroactive polymers, Dye sensitized solar cells, electroluminescent foils).

— Teaching Experience

Spring-Fall. 2014-2018
Teaching Assistant, Viterbi School of Engineering/ dept. of Civil Engineering, USC
CE107- Intro to Civil Engineering Graphics: Prepared course material and tutorial for teaching student Autocad & REVIT
-CE566-Construction Management & Scheduling" . Co-Taught the course and prepared tutorials for using the Primavera P6 software
CE469- Sustainable Design and Construction. Prepared course material.

Spring-Fall. 2014-2016
Teaching Assistant, School of Architecture / USC
ARCH305-Building Physics II. Delivered parametric design seminars (Rhino/Grasshopper)
ARCH490- Arch. Directed research- Agent Based Modeling: Developed research projects with master students and provided computational assistance
ARCH590- Special Topics-Informed form : Delivered tutorials on parametric structural design and finite element analysis

March 2017.
Tutor, School of Arch. / Texas A&M College Station
"Reci Form-Finding", One week parametric design and fabrication workshop on form finding using recirpocal frames structures

December 2016.
Tutor, Universidad Iberoamericana / Mexico City,
"Design Agency", One week computational design workshop on generative design methods in relation to environmental analysis

March 2013.
Tutor, Zurich School of Fine Arts / Switzerland.
"Intro to Generative design", Four day introductory workshop in Grasshopper for Rhino at the dept of Interactive Media & Arts at ZHDK

— Working Experience

Aug. 2019-...
Computational Design Lead, "IBI Group", Los Angeles, USA.
-Leads the parametric design team consisting of 7 people and develops algorithmic solutions that range from parametric planning to generative building design
-Does research and development and implements web based design tools and energy modelling workflows that allow interoperability among different teams

Summer. 2018
Computational Designer, "Buro Happold Engineering", Los Angeles, USA.
-Assisted in the development of the codebase for the US offices' internal Software platform.
-Developed scripts for solving project based challenges of design rationalization and optimization

Sept. 2011-2019
Co-founder, Principal Architect, "Topotheque design office", Ioannina, Greece.
-Computational modeling and digital fabrication of bespoke building elements for small scale -architectural projects
-Researched, developed and implemented a workflow for the production of parametrically designed sunglasses for "ENLITE" vision, a start-up company specializing in wooden sunglasses.

Sept. 2010-2011
Project Architect, "Studio Pei-Zhu", Beijing, China.
-"NAMOC", Preliminary study. Computational Designer in the invited competition for the new National Arts Museum of China. Scripted and developed structural schemes.
"Louis Vuitton's Beijing maison", Preliminary study. Lead facade designer in an invited competition for the firm's new flagship store in Beijing.
" Phad Tad Ke garden pavillion". Preliminary&Final study. Project manager and lead designer for an exhibition pavilion.

Summer. 2008
Architect trainee, "GRAFT architects", Berlin, Germany.
"Iveria hotel,Tilbisi": Construction phase. Produced and checked construction drawings as well as conducted site supervision
"Graft Moebel": Complete study. Designed, presented and prepared shop drawings for the office's new furniture.

— Skills

Computational.
Python, Java, Javascript, C#, Processing , VBscript, Typescript, Grasshopper, Dynamo, HTML, React

Digital.
Rhinoceros3d, Autodesk Maya, Fusion, Unity, Vray, AlphaCAM, RhinoCAM, Adobe Creative Suite

BIM.
Revit, Synchro, Solibri, Navisworks

Project Management.
Primavera P6,Microsoft Office, EndNote, Tableau

Linguistic.
Greek / native : Mother language
English /fluent : "Proficiency" certificate from the universities of Cambridge and Michigan.
German / fluent : "Mittelstufe" certificate from Goethe Institute
Spanish/Portuguese / good : basic writing and good oral skills

— Awards

September 2017.
Featured Research Assistant at the Viterbi School of Engineering

December 2016.
Recipient of the "Builder in Residence Award", for conducting research at Autodesk's BUILDSPACE (Boston) in collaboration with IAAC.

September 2016.
Recipient of the "Myronis Fellowship", for the research work at USC.

June 2015.
Recipient of "Gerondelis Foundation" Excellence Award.

June 2013.
Recipient "Onassis Foundation Scholarship for graduate studies abroad.

June 2012.
Recipient of "IKEA Stiftung Award" for the research work realized during the Master studies at ETH.

— Exhibitions

May 2016.
#This is a co-op: Immigration Center in Athens", Venice Biennale of Architecture, Italy. Selection of Topotheque design office's proposal for an immigration center in Athens to participate at the Greek Pavilion.

September 2012.
"Foundation IKEA selection", ELAC, Lausanne Museum of Contemporary Art Selection of the "Bennet linkage" to be featured on foundation's scholars' exhibition.

September 2011.
"Biennale:3", Thessaloniki Biennale of Contemporary Art, Greece. Selection of "crystal decoded" diploma thesis at AUTH to be featured on the main exhibition.

December 2010
"UTOPIA",Dynamo Project Space, Thessaloniki, Greece. Exhibition of Topotheque's computational design work.

— Publications

December 2023.
E. Pantazis, "Designing with Multi Agent Systems: A computational methodology for Form-Finding using Behaviors", De Gruyter, Berlin, DE (in press)

July 2022.
E. Pantazis, Koc E., Soibelman L.: "The Implications of the 4.0 Revolution in the AEC Industry on the Lean Construction Paradigm", in Lean Construction 4.0: Driving a Digital Revolution of Production Management in the AEC, Gonzalez V. A., et. Al, Eds.(1st ed.),   Routledge.

December 2019.
Koc E., E. Pantazis, Soibelman L. and Gerber D. : "Industry 4.0: Emerging Trends and Research Directions", in Construction 4.0- Innovation Platform for the Built Environment, Sawhney A., et. Al, Eds., (1st ed.), Taylor & Francis.

July 2019.
E. Pantazis: "Environmental Aware Shell Design: Usign solar path as a form finding force" in ArchiDoct e-Journal, Kontovourkis O., Ed, Vol 13, European Network of Head of Schools of Architecture (ENHSA)

October 2018.
E. Pantazis, and D. J. Gerber, "Beyond Geometric complexity: A critical review of Complexity Theory in Architecture". Architectural Science Review Journal, Vol 60.

October 2017.
E. Pantazis, and D. J. Gerber, "A Framework for generating and evaluating façade designs using a multi-agent systems approach". International Journal of Architectural Computing, Vol 76, p. 45-58.

December 2017.
D. J. Gerber, E. Pantazis, and A. Wang, "A multi-agent approach for performance based architecture: Design exploring geometry,user and environmental agencies in facades". Automation in Construction, Vol 16, p. 248-270.

September 2017.
A. Heydarian, .E Pantazis, A. Wang, D. Gerber,"Towards user centered building design: Identifying end-user lighting preferences via immersive virtual environments", Automation in Construction, Vol. 81,p. 56-66.

December 2016.
E. Pantazis, and D. J. Gerber, "Emergent order through swarm fluctuations - A framework for exploring self-organizing structures using swarm robotics, Research Paper, 35th eCAADe, Sapienza University of Rome, Italy p. 75-84.

October 2016.
A. Heydarian, E. Pantazis, JP. Carneiro, and D. J. Gerber, "Lights, building, action: Impact of default lighting settings on occupant behaviour". Journal of Environmental Psychology, Vol 48, p. 212-223.

September 2016.
E. Pantazis, E., M. Vermisso and J. Sadegh, "Emergent Pattern Formation via Embodied Encoding of Bristle Bots". Research Project, ACADIA16, Michigan.

July 2015.
E. Pantazis, D. J. Gerber, "A Multi-Agent System for Design: Geometric complexity in support of building performance", SIMAUD16 Conference Proceedings,Research Paper, London

September 2014.
L. S. Marcolino, E. Pantazis, D. J. Gerber, B. Kolev, S. Price, Y. Tian, M. Tambe "Agents vote for the environment: Designing energy-efficient architecture", AAAI 2015, Workshop on Computational Sustainability, Workshop Paper, Texas

August 2014.
E. Pantazis, and D. J. Gerber, "Material Swarm Articulations - New View Reciprocal Frame Canopy" Fusion, Proceedings of the 32nd eCAADe Conference, Newcastle, Vol 1., p.463-473.

June 2009.
E. Pantazis,"BDDF-Bridging Digitally Design and Fabrication", AUTH, Dissertation Project Review,Thessaloniki.

Evangelos is the computational design lead for IBI Group where he is tasked with developing performance based design tools and workflows across different disciplines. He holds a Ph.D. in Civil and Environmental Engineering from the University of Southern California (2019) and a Masters of Advanced studies in the field of Computer Aided Architectural Design from the ETH in Zurich (2012). He received his Diploma with honors from the Aristotle's University of Thessaloniki (2010) and he is a registered architect in Greece. Evangelos has conducted research and taught technical seminars and studio courses at the dept. of Civil and Environmental Engineering at USC. His research work focused on the use Multi Agent Design Systems and the integration of generative design techniques with numerical analysis and digital fabrication techniques.

Prior to IBI, Evangelos gained professional experience in several international design and tech firms, including Graft Architects in Berlin, Studio Pei Zhu in Beijing, Autodesk Inc and Buro Happold Engineering in Los Angeles. He has co-founded Topotheque design office, a studio that engages computational design with various tangent disciplines, including architecture, furniture and product design. His work has been presented in international design-computing conferences and his professional work has been exhibited at the Venice Biennale of Architecture, the Modern Art Museum of Lausanne (ELAC) and the Benaki Museum in Athens.
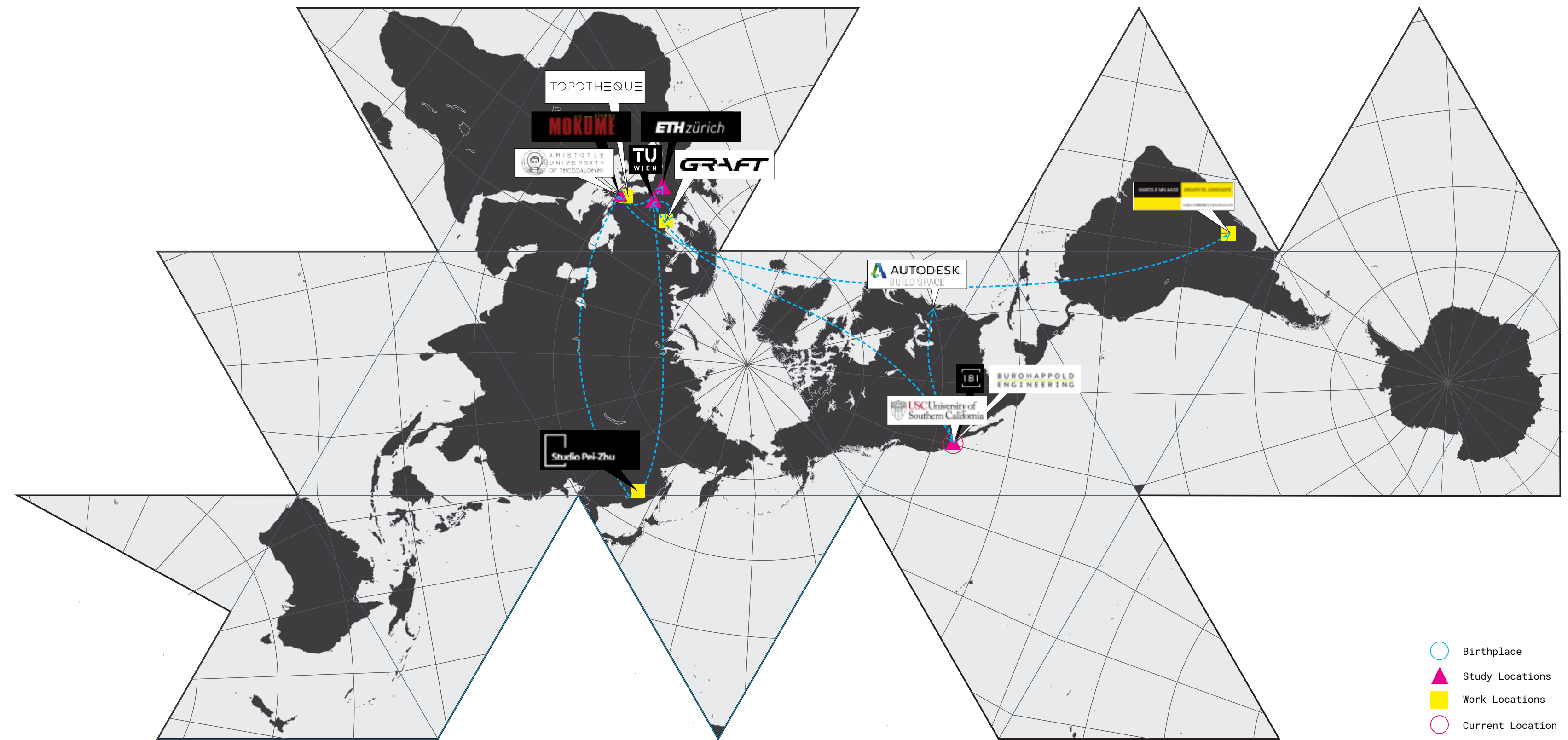
○ Birthplace
▲ Study Locations
■ Work Locations
○ Current Location