Stephan **Heuel**

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Summary

As an experienced Engineering Manager and digitalization expert, I bring technical expertise in the fields of data engineering, software development, statistics, and machine learning, and I possess extensive leadership experience in cross-functional teams. In my current position as Executive Director at MSCI, I make a significant contribution to the development of climate-related data products and successfully drive digital transformation by integrating agile methods as well as the use of AI and geospatial data.

My academic background in Computer Science and Geomatics, combined with my experience as a partner at EBP in IT consulting, allows me to integrate technology and business processes in a holistic manner. A key focus of my work is the effective communication and teaching of new and proven technologies and processes to all stakeholders involved: A deep understanding of the task and the technologies significantly increases quality and accelerates project execution.

Work Experience

Resilens   *Zurich*

CHIEF TECHNOLOGY OFFICER   *February 2026 - present*

- Defining the technical vision and architecture for a scalable climate adaptation decision platform
- Designing and implementing the end-to-end data and analytics pipeline (ingestion, processing, modeling, APIs, delivery)
- Building and leading the engineering team, establishing strong development practices and an execution-focused culture
- Ensuring security, reliability, and multi-tenancy from the outset
- Translating climate science, geospatial, and asset data into decision-ready, explainable products for customers
- Aligning the technology roadmap with product strategy, customer needs, and company milestones
- Evaluating and integrating external data sources, partners, and research collaborations
- Supporting fundraising and customer engagements with technical strategy and system design

Fotokite   *Zurich*

HEAD OF APPLICATION ENGINEERING   *May 2025 - January 2026*

- Leading, developing and coaching the software engineering team members
- Oversees the full software lifecycle (requirements, architecture, design, implementation, deployment, maintenance, support)
- Designing client-oriented software and services and ensuring timely project delivery by allocating the right resources to project teams and removing blockers in coordination with other leads
- Driving architectural decisions by facilitating and developing expertise in the team
- Defining and implementing best practices, software engineering and quality processes, and tools with the team
- Driving strategic initiatives to scale and build the company and the product

MSCI   *Zurich*

EXECUTIVE DIRECTOR AND OFFICE HEAD   *March 2021 - March 2025*

- Leading a team of more than 20 software developers in Zurich, Budapest, Berlin, and India
- Transformation and integration of the software infrastructure of a startup into a complex corporate architecture
- Design and planning of climate-related data products (footprinting, risk, and impact models for 10,000 publicly traded companies with 20 climate change scenarios)
- Introduction of agile methods and project management practices in a cross-functional team of 70 scientists and software developers
- Identifying and designing practical use cases for artificial intelligence, planning and execution including a multi-day Climate AI Hackathon with Google at the end of 2023
- Leading the MSCI office in Zurich with 50 employees, ensuring alignment and further development of the office with the company's objectives

EBP Switzerland   *Zurich*

PARTNER, HEAD OF IT CONSULTING   *January 2018 - March 2021*

- Partner and member of the extended executive management of EBP
- Co-responsibility for growth in the IT sector from 25 to 40 people over 5 years
- Founding a new division for IT consulting in 2019
- Key Account Manager for, among others, SBB, Migros, and Swissgrid, responsible for integrated geospatial services on the SBB Mobile app and web
- Provision of consulting services for public authorities at cantonal and national levels
- Initiation and market launch of innovative new consulting products, such as the "EBP Design Sprint"

EBP Switzerland
Zurich

Head of Geoinformation
January 2010 - December 2017

- Leading the geoinformation and data science team of six people
- Focus on projects in the transport sector, particularly in the integration of geoinformation in strategy, architecture, data analysis, and training
- Successful acquisition of new client projects, including a major project with the Swiss Federal Railways
- Execution of several geodata projects and studies for autonomous driving, routing capabilities, and pedestrian accessibility

EBP Switzerland
Zurich

Project Manager
January 2007 - December 2009

- Rejoining EBP Switzerland as Project Manager and expert for GIS infrastructure
- Planning and development of the GIS infrastructure for MeteoSwiss based on the ArcGIS platform
- Successful integration of GIS with MeteoSwiss's internal data warehouse
- Taking on various roles in client projects (software architecture, business analysis, project management, quality assurance)

Geo-Information Science and Earth Observation (ITC), University of Twente
Enschede, Netherlands

Assistant Professor for "Mobile Mapping"
January 2005 - December 2006

- Research in the field of computer vision with image and radar sensors
- Advising three doctoral students
- Lectures for master's students in programming
- Publication of papers on the extraction of flood maps from oblique views captured from helicopters

EBP Switzerland
Zurich

GIS Analyst and Software Developer
January 2002 - December 2004

- Collaboration on several interdisciplinary projects
- Development of software and data flows for the first international flood risk maps on the web for Germany, France, and Luxembourg
- Development of a database for critical infrastructure for the Federal Office for Security in Information Technology, Germany
- Leading and conducting training events for geospatial databases at cantonal offices

Siemens Corporate Research
Princeton, New Jersey, U.S.A.

Visiting Researcher
September 1999 - April 2000

- Research on the extraction of cylindrical pipes from photos of industrial plants, particularly the extraction of straight lines from multiple photographs to estimate the position in 3D

University of Bonn
Bonn, Germany

Research Associate
September 1997 - December 2001

- Responsible for lectures and exercises for students in computer vision and machine learning
- Creation of a statistical algebraic framework for calculating points, lines, and planes with uncertainty
- Application of the framework to the extraction of buildings from aerial images
- The work was published at international conferences, awarded, and published in the "Lecture Notes for Computer Sciences" by Springer

University of Southern California
Los Angeles, California, U.S.A.

Visiting Researcher
August 2004 - August 2005

- Visiting researcher at the Computer Vision Lab
- Publication of a paper on incorporating interaction into an automated modeling system for buildings

Education

University of Bonn
Germany

August 1997 - December 2001

Dr.-Ing. Geomatics, summa cum laude
(Completed 2004)

University of Bonn
Germany

Diploma Computer Science (MSc)
October 1991 - July 1997

Technical Skills

Business Development	Jira, Miro, Office Suite, Salesforce, Generative AI
Data Science	Python Stack, Statistical and geospatial Analysis, Data Visualization
Software Development	CI/CD (Azure Devops, Github), Cloud Computing (GCP, Azure), Kubernetes/Docker, Code Co-pilots
Software Design	Cloud Architecture, Data Engineering, Enterprise Systems, Digital Transformation
Geoinformation	ArcGIS platform, Open Source GIS, Specialized ETL tools

Awards

2000	**Best Paper Award "Statistically Testing Uncertain Geometric Relations"**, German Association for Pattern Recognition, DAGM	*Kiel*
2004	**Otto von Gruber Award**, International Society for Photogrammetry and Remote Sensing (ISPRS)	*Istanbul*

Languages

German	Native
English	Proficient (C2)
French	Basic knowledge (A2)

Out of Office Activities

2013 – 2022	**Co-founder and Organizer of the GeoBeer Network Switzerland**, GeoBeer is a professional network of over 500 people interested in geography, GIS, cartography, and current technologies. With a newsletter, social media activities, and quarterly meetings, the exchange of ideas is promoted. Events take place throughout Switzerland and are sponsored by companies or organizations.	*Zurich*
2016 – 2021	**Chairman of the Board of the Childcare Organization Verein FEE.**, The Verein FEE in Meilen offers high-quality, family- and school-complementary care services for children from four months until the end of primary school. The services include daycare centers, student clubs, and the placement of day families. The association employs 140 staff members.	*Meilen*

Selected Publications

Mobile augmented reality to identify mountains
S. Karpischek, C. Marforio, M. Godenzi, S. Heuel, F. Michahelles
Roots for the Future of Ambient Intelligence, 2009

Multi-scale texture and color segmentation of oblique airborne video data for damage classification
A.K. Rasika, N. Kerle, S. Heuel
International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences 36 (2006). 2006

Uncertain Projective Geometry
S. Heuel
. Lecture Notes in Computer Science 3008 (2004). 2004

Points, lines, and planes and their optimal estimation
S. Heuel
23rd DAGM Symposium, Munich, Germany, September 12-14, 2001. Proceedings, 2001

Matching, reconstructing and grouping 3D lines from multiple views using uncertain projective geometry
S. Heuel, W. Förstner
Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition, 2001

Statistically Testing Uncertain Geometric Relations
Wolfgang Förstner, Ansgar Brunn, Stephan Heuel
Mustererkennung 2000, 2000

Topological and geometrical reasoning in 3D grouping for reconstructing polyhedral surfaces
S. Heuel, W. Förstner, F. Lang
International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, 2000

Including interaction in an automated modelling system
Stephan Heuel, Ramakant Nevatia
Proceedings of the IEEE International Conference on Computer Vision, 1995