

Kamen Beronov – Curriculum Vitae

Personal Data

born July 22nd, 1963 in Bulgaria

Languages

German	mother tongue
English	fluent, business-level proficiency
Japanese	medium speaking proficiency
Bulgarian	mother tongue



Contact

kberonov@o2mail.de

+49 176 2000 2981

Freischützstr. 50, 81927 Munich, Germany

Education

Ph.D.	1992—1996	Kyoto University (Japan), Res. Inst. Math. Sci. Thesis in mathematical physics, numerical simulations
M.Sci.	1984—1989	State Univ. "Kl. Okhridski", Sofia (Bulgaria) Batchelor in mathematics und informatics, maximum grades score Thesis in applied mathematics, numerical simulations
College	1977—1982	Foreign languages college Nr.1, Varna (Bulgaria) English language track, maximum grades score German language track (as a private student)

Document Structure

Personal Data	1
Recent Experience	2
Employment	2
Beta Systems Software AG (Berlin, Germany)	2
Certifications	3
Software Development and IT Skills	3
Earlier Experience	3
Employment	3
bizcon AG (Munich, Germany)	3
Leibniz Supercomputing Center (Garching/Munich, Germany)	5
Friedrich-Alexander-University Erlangen-Nürnberg (Erlangen, Germany)	5
Nagoya University (Nagoya, Japan)	5
Kyoto University (Kyoto, Japan)	5
Bulgarian Academy of Sciences (Sofia, Bulgaria)	5

Earlier Experience	5
Independent Occupation	5
Certifications	6
Selected Projects.....	6
Software Development and IT Skills.....	8

Recent Experience

Employment

Beta Systems Software AG (Berlin, Germany)

- since 2019, as Senior Solution Architect, home-based in Munich

Tasks Focus

2025-2026 – AI application pioneer

- massive refactoring of legacy code bases using AI
- software analysis, (re)design, implementation, automated testing using AI
- AI agents used: mainly Claude Opus, via API or Github Copilot
- preparation of RAG covering internal documentation and ticketing systems

2023-2025 – lead architect

- technology focus (alongside the product suite of Beta Systems IAM)
 - automation: PowerShell, Kubernetes
 - deploying custom signature- and encryption-services
 - SSO: OIDC/OAuth-2.0, CIBA, TOTP, SLO, federation/user-consolidation, SAML-2
- longer-termed projects for very large customers
 - requirements and solution negotiation, responsible for customer acceptance
 - design and implementation (incl. documentation and go-live) of stand-alone solutions – with or without a supporting team
- internal projects (automation, cloud offerings, identity provider integration, etc.)
 - requirements and solution design
 - proof-of-concept and product implementation
 - internal infrastructure definition and maintenance

2020-2022 – technical lead

- project-related lead roles, covering up to 8 internal team members
- young colleagues coaching and development
- technology initiatives lead

2019-2022 – solution delivery for new customers

- requirements management, solution architect
- project management lead
- solution deployment, acceptance tests, quality management
- customer support management and delivery

Selected Projects

2024—2026 Single-sign-on projects – at a major bank, at a major insurer, as well as internal PoCs

2025—2026 Refactoring of legacy code bases, using AI, decompilation, build pipelines, automatic testing, etc. for large-data roll-over batch tasks at a major bank

2022—2025 IAMBund Project for unified identity management across federal authorities. Roles: design, PoC, custom process tooling, negotiation of APIs, ticket-management, documentation, etc.

2023—2024 Automation of documentary compliance verification in a leading IT-service provider for the German banking sector

2020— 2025 Internal teams for setting up fast product deployment platforms, cloud and hybrid.

2019—2021 Project lead, solution architecture, and part of the technical implementation of IAM system and processes setup:

2021 – a private bank. Target systems initially: AD, home-grown systems (REST, PostgreSQL)

2020 – an institutional bank. Target systems initially: AD, large number of SAP clients

2019 – an established fintech

2018 Complete Data Lake architecture for a mid-sized corporation servicing major chemical and pharmaceutical corporations

Certifications

2025 *Cloud solutions*

- AWS Certified Solutions Architect – Associate
- AWS Certified Cloud Practitioner

2017—2018 *Compliance*

- ISO 27001 foundation
- Certified Data Privacy Officer

Software Development and IT Skills

Since 2024 Claude, ChatGPT, Gemini; via chats, via IDE (Java, PSh, Py, Rust), via API (Claude)

2022—2024 Visual Studio Code Toolchains

2019— 2025 JetBrains Toolchain (Java, Go, Rust); Garancy Suite (complete IAM solution)

Earlier Experience

Employment

bizcon AG (Munich, Germany)

2011—2018 as Senior Consultant

Tasks Focus

- project lead on: privacy and compliance; big-data security;
- integration, development, testing, and PoC infrastructure maintenance of software from vendor partners, and of open-source and own components
- DevOps, agile application development, upgrade pipeline, virtualization, Docker

since 2017 – DevSecOps

- product trainings: HPE Fortify, Centrify, Nevis, Blackberry

- agile dev tools: Jira, Trello; Git- and Hg-clients
- major projects on production and test data, in big-data and DWH settings, including data masking and encryption, using agile development and integration cycles
- PAM project (BWI); hybrid-IT solution by Centrify

since 2015 – roles at employer's head quarter

- initiation of a strategic investment in big data security;
- proof-of-concept installations (see "Selected projects" below);
- marketing; CRM; publications (white papers, articles for conferences and institutional sites); employer's website (design, blog, news); webinars (e.g. on data-centric security)
- partnerships (companies in the EU, CH, USA, India): initiation, trainings, maintenance
- tenders (large private and public): RFIs, RFPs, on-site workshops, pilot installations

since 2015 – data privacy and IT security compliance

- authoring of webinars and publications on GDPR, on the GDV code of conduct, etc.
- projects on GDPR and BDSG (the German data privacy law); ISMS audit projects
- cooperation with Blackberry on product extensions targeting GDPR requirements
- personal certifications: ISO 27001, data privacy officer

since 2014 – data-centric information security

- format-preserving encryption (FPE) & masking, tokenization, identity-based encryption (IBE): in RDBMS, Hadoop, Spark, MS Office
- data lineage with Apache NiFi (HDF), Micro Focus SDM, Dataguise
- 1-year project (insurance holding): FPE integration into DWH (MS SQL, Informatica, IBM)
- 1-year project (energy provider): centralized data masking & test data management
- product trainings: Informatica Secure@Source, Dataguise, Voltage (Micro Focus), etc.

since 2014 – big data

- Hadoop: infrastructure (CDH & HDP), multitenancy, governance
- analytics: Spark, Hive; integration of existing DWH
- security: access management, encryption, monitoring, log analysis & lifecycle
- initial set up of a corporate data lake: requirements engineering; architecture; operation, security, business continuity concepts; short- and mid-term project planning

since 2011 – software components development

- agile software design and development (Java, JS, C#, Go);
- UAT, staging, production, support
- MS VS & MS VS Code, Eclipse, IntelliJ; see "agile dev tools" above
- VMware, VBox, Hyper-V; Docker, Kubernetes, Rancher

since 2011 – identity- and access management (IAM)

- Long-term project (global corporation's CIT and SFS): integration of ~300 applications, DevOps;
- process and transition management (large banks)
- data base integration: AD/LDAP, SAP, Oracle;
- agile software design and development (Java, JS), UAT, staging, production, support;
- workflow automation: approvals, re-certifications, audit, reporting;
- transition management involving 4 global players each headquartered in a different country, including merger, carve-out, change of main IT services supplier;
- corporate IT process management; application and data life cycles;
- formal product trainings: Centrify (CASB), Centrify, Nevis, SailPoint, DirX;

Leibniz Supercomputing Center (Garching/Munich, Germany)

2009—2010 as Senior Research Associate

Tasks

- multi-project management: EU wide coordination of up to 15 subprojects at a time, with up to 50 participants and 3 M € budget per subproject
- resource allocation and prioritization of projects; monthly and annual reports
- grid and cloud computing middleware, maintaining an IAM infrastructure, certificate stores and life-cycle, grid middleware, LDAPs, Kerberos, federations
- service design and delivery; ITIL conforming process management
- organization of trainings and conferences; publication of reports and articles

Friedrich-Alexander-University Erlangen-Nürnberg (Erlangen, Germany)

2001—2008 as Research Associate

Tasks

- group lead, with up to 8 collaborators and annual budget up to 0.5 M €
- project acquisition and management
- solution design and R&D, engineering fields:
 - automotive, aero-space,
 - pharma, medical devices,
 - electrical appliances, energy,
 - process engineering, nanotechnology
- teaching, supervision of master and doctor candidates
- publications, trainings, conferences; editor-in-chief of a small quarterly.

Nagoya University (Nagoya, Japan)

1998—2001 as Research Associate

Kyoto University (Kyoto, Japan)

1996—1998 as Center of Excellence Lecturer

Bulgarian Academy of Sciences (Sofia, Bulgaria)

1989—1992 as Research Associate

Earlier Experience

Independent Occupation

Since 2009 coSyMBA UG (Munich, Germany)

- executive responsibility, financial and administrative tasks
- IT and process consulting, specializing on strongly regulated industries
- software development – team size = 10, application areas = healthcare, SaaS

2010—2017 EU FP7 (H2020)

Expert, Reviewer, Rapporteur for EU Research Projects

- distributed computing, IT-infrastructure
- medical research, biotech

2007—2008 Start-up

- medical device (Class IIa)

1997—1998 Osaka Gas Co. (Kyoto, Japan)

- consulting, project lead

1996—1997 Sangyo University (Kyoto, Japan)

- lecturer in numerical methods

1990—1992 Bulgarian Academy of Sciences

- software development

1984—1988 State Univ. “Kl. Okhridski” (Sofia, Bulgaria)

- teaching assistant in programming
- software development at a spin-off

Product and Business Development Summary

- initiator of 2 start-ups
- intellectual property, technology transfer
- regulatory affairs, product certification
- outsourcing, R&D projects with USA, EU countries, Japan
- initiator of 2 start-ups
- more than 500 professional and business contacts worldwide

Certifications

2009—2013 Process Management and Design

- ISO 20000 certified IT services process manager
- Major Incident Manager at LRZ Garching

2004 Business Development

- Netzwerk NordBayern – Seminarreihe “Wirtschaftliche Verwertung von Innovationen”

2003 Computational Fluid Dynamics

- Star-CD training course

Selected Projects

2018 IAM for German banks

- management support and external user management in a major private bank merger
- preparation for ECB audit at an institutional bank

2017—2018 Audit and Compliance

- preparation for GDPR compliance or for ISO 27001 certification of SMEs from different branches
- Initiation of ISMS and preparation for ISO 27001 audit of a German SaaS provider

2015—2018 Data-centric security solution contract

- large insurance
- integration of FPE into the BWH; preparation for GDPR compliance
- PoC for big data, involving typical data warehouses
- solution components: ETL components (Informatica), format-preserving encryption (HPE) , PowerCenter (Informatica), Cognos (IBM)), SQL Server (Microsoft).

2017 Data and communication security services

- industrial-tech and automotive manufacturers
- tenders and PoCs
- solution components: encryption, monitoring, IAM, PKI, HA and scalability, containerization, etc.

2014—2017 Big data

- automated installation and administration of Hadoop mini-clusters
- comparing Cloudera and Hortonworks distributions. Analysis and management of big data using CLIs or Python APIs, directly in HDFS or via Hive/Pig.
- Use cases using remote processing or own Hive-UDE/UDTF/UAF. Spark integration
- HDP cluster data ingestion, securing, processing, integration of Hortonworks Data Flow (HDF) and IoT source model, Spark, RDBMs (Oracle 11 and 12, MySQL, MS SQL Server 2012 and newer, PostgreSQL)
- data-centric security solutions for big data and legacy data stores, using identity-based and format-preserving encryption, UDFs, LDAP IdM integration, RBAC and ABAC, and integrating the components through micro services

2014—2016 Non-SQL

- external consulting on already productive big data graph processing at a logistic enterprise; comparison of Neo4J and Cassandra/Titan
- securing MongoDB and Elastic using external attribute-based encryption, IdP, RBAC, PeP. Scalability on small clusters. Access history analysis using Logstash and R. PoC for the replacement of BaseX

2011—2016 Transformation projects support, with focus on IAM

- 2015—2016 IAM transition project at global corporation, including the replacement of main IT services provider and moving most of the corporate IT services into a private cloud. My particular involvement was co-managing the transition of one overarching service and catalogue, involving solution design, interfacing related sub-project teams, the IAM teams in all three involved large companies, the corporate security teams, the data protection officer for the customer, front-end implementation teams, some corporate communication teams and higher management
- 2014—2015 Transition project for the overall IAM of a major Swiss university, including a multi-stage RFP round, winning the tender, designing the solution on the basis of a stand-alone IAM product stack and the integration of multiple AD, LDAP, Oracle, PG master and target systems, PoC, deployment
- 2012—2014 Corporate IT project on IAM automation and centralization in a global corporation, incl. the integration of multiple sources (LDAP, Oracle, SAP), over 80 target systems, several cloud services. Participation at all stages: requirements and design documents, software development, testing, staging, documentation, support. agile development
- 2011—2012 Corporate IT splitt in a carve-out at a major global tech corporation

2013—2014 Development of own software solutions

- 2013—2014 IAM log archiving and (10 GB/day, 5 years archive retention) involving IAM software, XLST, XQuery, BaseX, Java, JS, JQuery, Perl
- 2010—2011 Mailing solution replacing vendor solution in large IAM deployment

2010—2012 Initiation of a project on resilient cluster computing at HPC centers, including the building of a consortium and the solution design. Participation in several work packages, e.g. automated recovery from node outages, or monitoring data collection and database

2006—2010 Grid Computing

- participation or lead in several grid computing projects
- focus on federated IAM based on an international federation of publicly run Cas
- integration of grid middleware to bind to this PKI infrastructure
- user support on certificate management. Kerberos
- integration of numerous components through web services

2002—2010 High-Performance Computing (HPC)

- numerical simulations and statistical data evaluation on some of the largest European supercomputers
- automation of resource monitoring, resource scheduling, archiving.
- access management, billing, reporting

1998—2001 Extreme HPC

- Japanese „Earth Simulator“ national project – a 640-node cluster that led the high-performance computing (HPC) „top 500“list for several years
- turbulence modelling, simulation, data processing and publication

Software Development and IT Skills

- 2014—2025 MS SQL Server; ElasticSearch
- 2014—2018 Hadoop (Cloudera, Hortonworks); Spark
- 2011—2015 HPC fault tolerance; SQLite; Nagios; LFS
- 2012—2018 MongoDB, ArangoDB, Neo4J, BaseX
- 2011—2023 Oracle SQL, SAP; VMware
- 2011—2018 Python 3, Perl; Tcl, shell scripting; MySQL
- 2009—2023 LDAP; VirtualBox
- 2009—2011 data mining with R; visualization & simulation with GPUs; automation with Py
- 2009—2010 Nagios+Ganglia monitoring, fault tolerance in distributed systems;
- 2009—2025 UML, Enterprise Architect ; MS Project, Access, Visio
- 2009—2018 ITIL and PM Software; Mind Map
- 2005—2015 Java IDEs; Jenkins; XML, JSON, YAML
- 2005—2010 Java; web services; grid infrastructure: remote workflow management;
- 2005—2010 MATLAB; ontologies, RDF; neuronal networks
- 2003—2010 technical, medical, and remote visualization: Amira, CoVisE, own VTK-based tools
- 1989—2001 Fortran, C++; SVN; large-data visualization
- 1984—1986 Pascal, Ada; Apple 2; IBM 370