Alexey Ott's Curriculum Vitae

Personal Information

- **Name**: Alexey (Alex) Ott

- **Address**: Paderborn, Germany

- **E-mail**: alexott@gmail.com (please use it as primary contact)

- **Phone**: +4917650439409 (mobile)

- **Citizenship**: German, Russian

- **Date of Birth**: 1974

- **Personal site**: http://alexott.net/en/

- **LinkedIn profile**: http://www.linkedin.com/in/alexott

- Blog: http://alexott.blogspot.com

- Github: https://github.com/alexott

Summary

- Significant experience in products development for information security;

- Leadership in software development projects (commercial & open-source);

- Software architect and developer using different programming languages & technologies (cloud, on-premise);

- Business vision of tasks & requirements, results-oriented.

Work Experience

- **Senior Solutions Architect** at DataStax
  Dates (from-to): 03.2019-now
  Name and address of employer: DataStax[1], 33100 Paderborn, Germany
  Positions held: Senior Solutions Architect
  Type of business: Software Development/Big Data
  Main activities and responsibilities:

  - Working with customers on delivery of solutions based on the DataStax Enterprise, including architectural reviews, building prototypes, implementation guidance, pre- & post-release health checks, analysis of performance & other problems, providing guidance on fixing them, etc.;

  - Pre-sales activity - discussion of possible architectures with customers, helping prepare sound technical proposals, . . . ;

  - Providing feedback to product teams on new functionality requested by customers, and general feedback on existing functionality.

    Technology stack: DataStax Enterprise, Apache Cassandra, Apache Spark, Apache Solr, DC/OS (Apache Mesos), Kubernetes, Java, Python, Clojure, Scala, Apache Kafka/Kafka Streams/KSQL, Linux, . . .

- **Solutions Architect** at DataStax
  Dates (from-to): 01.2018–02.2019
  Name and address of employer: DataStax[2], 33100 Paderborn, Germany
  Positions held: Solutions Architect
  Type of business: Software Development/Big Data
  Main activities and responsibilities:

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[1] http://datastax.com
[2] http://datastax.com

- Working with customers on delivery of solutions based on the DataStax Enterprise, including architectural reviews, building prototypes, implementation guidance, pre- & post-release health checks, analysis of performance & other problems, providing guidance on fixing them, etc.;
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  Technology stack: DataStax Enterprise, Apache Cassandra, Apache Spark, Apache Solr, DC/OS (Apache Mesos), Kubernetes, Java, Python, Clojure, Scala, Apache Kafka/Kafka Streams/KSQL, Linux, . . .

- **Senior Software Architect** at McAfee/Intel Security
  Dates (from-to): 10.2016–12.2017
  Name and address of employer: McAfee[3], 33100 Paderborn, Germany
  Positions held: Solution Architect
  Type of business: Software Development
  Main activities and responsibilities:

  - Architecture of the CDP (Cloud Data Protection)[4] solution (implementing elements of CASB), involving multiple teams & products. Communication with stakeholders, preparing the architecture, tasks definition & coordination for involved teams (very geo-distributed), evaluation of technologies & prototyping, implementation of some components (Java, C++, Clojure, Docker-based microservices, . . .);
  - Development of URL & Content Categorization system using the range of machine learning & big data technologies (Apache HBase, Apache Solr, Apache Spark). Implementing the full machine learning workflow - model design, data collection & cleanup, feature extraction & selection, model evaluation, production deployment. Development of experimental models with Keras, XGBoost, scikit-learn, other frameworks.

- **Software Architect** at Intel Security. *(subsidiary of Intel Corporation)*
  Dates (from-to): 07.2014–09.2016
  Name and address of employer: Intel Security[5], 33100 Paderborn, Germany
  Positions held: Software Architect
  Type of business: Software Development
  Main activities and responsibilities:

  - Architecture and development of new URL & Content Categorization system using the range of machine learning & big data technologies (Apache HBase, Apache Solr, Apache Spark). Implementing the full machine learning workflow - model design, data collection & cleanup, feature extraction & selection, model evaluation, production deployment. Introduction of new system lead to greater coverage of the categorized resources, increased customer satisfaction, and decreasing of number of escalations;
  - Architecture & implementation of the log processing system (Apache Kafka, Apache Spark Streaming, Elasticsearch) that is base for McAfee Cloud Visibility[6] offering & reporting in Web Gateway Cloud Service[7].
  - Architecture of the CDP (Cloud Data Protection) solution involving multiple teams & products. Communication with stakeholders, preparing the architecture, tasks definition for involved teams, evaluation of technologies & prototyping, implementation of some components (Java, C++, Clojure).

- **Mentor** at Google Summer of Code 2014
  Dates (from-to): 05.2014–08.2014
  Main activities and responsibilities: Mentor for the project "Incanter and core.matrix integration"

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[3] http://mcafee.com
[4] https://www.mcafee.com/us/beta/public-betas/data-protection/cloud-data-protection.aspx
[5] http://intelsecurity.com
[6] https://www.mcafee.com/us/products/cloud-visibility-community-edition.aspx
[7] https://www.mcafee.com/us/products/web-gateway-cloud-service.aspx

- **Software Architect** at *McAfee, Inc. (subsidiary of Intel Corporation)*
  Dates (from-to): 03.2013–06.2014
  Name and address of employer: McAfee, Inc[8]. 33100 Paderborn, Germany
  Positions held: Software Architect
  Type of business: Software Development
  Main activities and responsibilities:

  - Architecture and development of identity management & CASB (cloud access security broker) components inside McAfee Web Gateway: SSO (Single Sign-On), Cloud Storage Encryption, etc.;
  - Coordination of development with other teams, requirements analysis, tasks definition, etc.

- **Principal Software Engineer** at *McAfee, Inc. (subsidiary of Intel Corporation)*
  Dates (from-to): 04.2011–02.2013
  Name and address of employer: McAfee, Inc[9]. 33100 Paderborn, Germany
  Positions held: Principal Software Engineer
  Type of business: Software Development
  Main activities and responsibilities:

  - Architecture and development of web-filtering and data leak prevention software (McAfee Web Gateway);
  - Provide training & support for 3rd party developers;
  - Quality "owner", responsible for introduction of quality-improving techniques and methodologies (code reviews, unit testing, analysis of existing problems & errors, continuous integration, static code analysis, etc.)—together with other organizational activities this lead to increase of product's quality, decrease number of customer escalations.

- **Author & Editor** at *Practice of Functional Programming (Journal)*
  Dates (from-to): 04.2009–04.2011
  Main activities and responsibilities:

  - Author of several articles on functional programming (Clojure, Scheme, etc.)
  - Preparation of new journal issues

- **Senior Software Developer** at *McAfee, Inc.*
  Dates (from-to): 01.2007–03.2011 (2007–2008—Secure Computing Corp.)
  Name and address of employer: McAfee, Inc[10]. 33100 Paderborn, Germany
  Positions held: Senior Software Developer
  Type of business: Software Development
  Main activities and responsibilities:

  - Development of content-filtering software (Webwasher/McAfee Web Gateway);
  - Architect of new versions of software—collecting requirements, creating top-level view, planning development activity, etc.

- **Head of Software development group & architect** at *Jet Infosystems*
  Dates (from-to): 10.2001–11.2006
  Name and address of employer: Jet Infosystems[11]. B. Novodmitrovskaya, 14/1, 127015 Moscow, Russia
  Positions held: Head of Software development group, System Architect
  Type of business: System Integration
  Main activities and responsibilities:

  - Head of development group (9 people), lead of of development projects;
  - Architect and development of custom and off-the-shelf software (C/C++, Scheme, Lisp, Java);
  - Participation in marketing activity, present solutions for customers;
  - Infrastructure architect (data & process integration projects, network projects, mail projects).

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[8]http://www.mcafee.com
[9]http://www.mcafee.com
[10]http://www.mcafee.com
[11]http://www.jetinfo.com

- **Projects done**:
    * **Mailboss** (aka SMAP "Dozor-Jet") – mail filtering and archiving software (architect and developer, leader of development process); https://jet.su/en/services/information_security/;
    * **Webboss** (aka SKVT "Dozor-Jet") – web filtering software (architect and develop software, lead the development process); https://jet.su/en/services/information_security/;
    * **BeepayXP** – payment processing software for the Vimpelkom – large Russian Mobile Company (Data architect, server infrastructure architect, project coordinator);
    * **File-NG** – data type detection library;
    * KC IAS - lead architect in data and process integration pilot project (on the base of Sun Java CAPS) for a Russian Central bank. Business process analysis, Project architecture design, product selection.
    * Content-type detection add-on for the Cerberus software (Mail filtering software for Lotus Notes);
    * Custom Web Portals for the government departments (architect solutions, project coordinator);
    * Mail projects for different clients (Infrastructure architect, project coordinator);
    * Custom software solutions (Development in C/C++, Java, Scheme).

- **Teaching assistant & lecturer** at *Tomsk Polytechnic University*
  Dates (from-to): 09.1998–08.2001
  Name and address of employer: Tomsk Polytechnic University, Lenina Str, 30, Tomsk, Russia
  Positions held: Assistant lecturer at Technical Physic's department (Teacher)
  Type of business: Education
  Main activities and responsibilities:

    - Provide trainings for students in branch of thermodynamic, molecular physic, computer modeling of physical processes;
    - Administration of faculty network (mix of Unix and Windows servers) – 1500 users;
    - Development of Intranet applications.

- **Developer** at *E-Compare Corp.*
  Dates (from-to): 10.2000 – 4.2001
  Name and address of employer: E-Compare Corp, USA
  Positions held: Developer (remote work)
  Type of business: Software Development
  Main activities and responsibilities:

    - Writing modules for search engine (Perl, Oracle);
    - Web programming (HTML, JavaScript).

Education and trainings

- **MBA** at *Magdeburg University*, Germany
  Dates (from-to): 2003–2005
  Title of qualification awarded: Master of Business Administration
  Name and type of organisation: Deutsches MBA Program, Magdeburg University, Germany
  Principal subjects: General management, Finance, Marketing

- **Engineer** at *Tomsk Polytechnic University*, Russia
  Dates (from-to): 1991–1997
  Title of qualification awarded: Physic (Engineer)
  Name and type of organisation: Physical-technical department of Tomsk Polytechnic University
  Principal subjects: Physic and Chemistry of Plasma, Mathematics
  Level in national classification: Higher education diploma

- Online courses:
  An Introduction to Artificial Intelligence[12] (Stanford). Score: 89%
  Machine Learning[13] (Stanford). Score: 100%

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[12]http://www.ai-class.com/
[13]https://www.coursera.org/course/ml

Natural Language Processing[14] (Stanford/Coursera). Score: 93%
Heterogeneous Parallel Programming[15] (University of Illinois at Urbana-Champaign/Coursera). Score: 100% with distinction
Computing for Data Analysis[16] (Johns Hopkins Bloomberg School of Public Health/Coursera). Score: 100% with distinction
Introduction to Data Science[17] (University of Washington/Coursera). Score: 90.1% with distinction
Model Thinking[18] (University of Michigan/Coursera). Score: 95% with distinction
Data Mining with Weka[19] (University of Waikato). Score: 100%
Functional Programming Principles in Scala[20] (École Polytechnique Fédérale de Lausanne/Coursera): Score: 100% with distinction
Pattern Discovery in Data Mining[21] (University of Illinois at Urbana-Champaign/Coursera). Score: 90.6%
Cluster Analysis in Data Mining[22] (University of Illinois at Urbana-Champaign/Coursera)
Mining of Massive Datasets[23] (Stanford/Coursera)
CS100.1x Introduction to Big Data with Apache Spark[24] (Berkley/edX). Score: 100%
CS190.1x Scalable Machine Learning[25] (Berkley/edX). Score: 100%
UT.5.02x LAFF: Linear Algebra - Foundations to Frontiers[26] (University of Texas/edX)
Introduction to Natural Language Processing[27] (University of Michigan). Score: 95.2%

Technical skills and competences

Patents

- Proxy Authentication for Single Sign-On[28]. Status: Application

Presentations

- 2 times presenter on Intel Software Professionals Conference (SWPC) on topics of software quality, and URL categorization. SWPC is internal conference with very rigorous selection of presentations;

- 2 times presenter at McAfee Innovation Summit - global internal conference about innovative solutions;

- Multiple presentations on small conferences & user groups on different topics - Clojure, Emacs, . . .

Programming languages and software development skills

- C and C++ – more than 15 years (mostly in Unix – Linux, Sun Solaris, HP-UX, FreeBSD);

- Java – 10 years (commercial & personal projects);

- Clojure - 8 years (commercial & personal projects);

- Python - 3 years (mostly personal projects);

- Other languages (mostly not active right now): Scheme and Common Lisp (8 years, commercial & personal projects), Erlang (2 years, personal projects), Haskell (1 year, personal projects), OCaml and F# (2 years, personal projects), Scala (personal projects), Go (1 year, personal projects), Perl (5 years, personal & commercial projects), SQL (7 years, Oracle and PostgreSQL);

- UML modeling in complex projects;

- Shell scripting languages - bash, sh, zsh, . . .

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[14]https://www.coursera.org/course/nlp/
[15]https://www.coursera.org/course/hetero
[16]https://www.coursera.org/course/compdata
[17]https://www.coursera.org/course/datasci
[18]https://www.coursera.org/course/modelthinking
[19]https://weka.waikato.ac.nz/dataminingwithweka/
[20]https://www.coursera.org/course/progfun
[21]https://www.coursera.org/course/patterndiscovery
[22]https://www.coursera.org/course/clusteranalysis
[23]https://www.coursera.org/course/mmds
[24]https://courses.edx.org/courses/BerkeleyX/CS100.1x/1T2015/info
[25]https://courses.edx.org/courses/BerkeleyX/CS190.1x/1T2015/info
[26]https://courses.edx.org/courses/UTAustinX/UT.5.02x/1T2015/info
[27]https://www.coursera.org/account/accomplishments/records/sXxgywdRUTjpRAC7
[28]http://patents.justia.com/patent/20160205089

- NoSQL databases: Apache HBase, Apache Solr, Elasticsearch, CouchDB;

- Continuous integration using Jenkins;

- Static code analysis using Coverity;

- Test-driven development (TDD) using different frameworks - JUnit, Mockito, GMock, GTest, Boost.Test, . . .

Other computer-related skills

- Administration of UNIX-like OSes – Linux (since 1996), Sun Solaris (2000–2006), HP-UX (2001–2006), FreeBSD (2000–2006);

- Administration of Windows OSes – NT4, 2000, XP, . . . ;

- Administration of relational databases (Oracle and PostgreSQL);

Open Source projects

I'm contributing to different open source code projects including:

- Clojure-related: Incanter, Leiningen, swank-clojure, Clojure, clojure-hadoop, labrepl;

- Emacs-related: el-get, magit, Muse, GNU Emacs, CEDET;

- ALTLinux—Linux distribution, package maintainer (2001–2004)

- Catdoc—Open-source converter for MS Office files, development of PPT & XLS converters;

- Dansguardian – web-filtering software;

- openfwtk—application level firewall;

- Russian documentation for Linux – author of different articles about Linux.

Information about other open source projects you can find on github[29] and ohloh[30].

Personal skills and competences

Languages

- **Russian**: Mother tongue

- **English**: Good reading, writing & verbal skills

- **German**: Good reading, basic writing and verbal skills

Social and organizational skills and competences

- Ability to work in multinational teams, work with foreign customers;

- Ability to work in teams (also geographically distributed) and alone;

- Experience in management of development teams;

- Practical experience in management of software projects;

- Participation in Open Source projects.

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[29]http://github.com/alexott
[30]https://www.ohloh.net/accounts/alexott

Other personal info

- **Artistic skills and competences**:

  - Author of multiple articles, in physics and computer-related branches (functional programming, Emacs, programming);
  - Co-author of Russian translation of "GNU Emacs manual", "Practical Common Lisp", "Types and programming languages", and some other.

- **Hobbies**:

  - Sport: Running, Cycling, Hiking