

# Alex Ott's Curriculum Vitae

## Personal Information

- **Name:** Alex Ott
- **Address:** Paderborn, Germany
- **E-mail:** alexott@gmail.com (please use it as primary contact)
- **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

- **Lead Specialist Solutions Architect** at Databricks

**Dates (from-to):** 02.2023-now

**Name and address of employer:** [Databricks](#)<sup>1</sup> (remote)

**Positions held:** Specialist Solutions Architect

**Type of business:** Software Development/Big Data

**Main activities and responsibilities:**

- Working with strategic customers on implementation of solutions based on the Databricks' Lakehouse Platform.

Technology stack: Apache Spark, MLFlow, Delta Lake, Scala, Python, SQL, Terraform, Go, ...

- **Senior Resident Solutions Architect** at Databricks

**Dates (from-to):** 08.2021–02.2023

**Name and address of employer:** [Databricks](#)<sup>2</sup> (remote)

**Positions held:** Resident Solutions Architect

**Type of business:** Software Development/Big Data

**Main activities and responsibilities:**

- Working with strategic customers on implementation of solutions based on the Databricks' Lakehouse Platform.

Technology stack: Apache Spark, MLFlow, Delta Lake, Scala, Python, SQL, Terraform, Go, ...

**Awards:**

- President's club FY22 (2021)

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<sup>1</sup><http://databricks.com>

<sup>2</sup><http://databricks.com>

- **Resident Solutions Architect** at Databricks  
**Dates (from-to):** 08.2020-now  
**Name and address of employer:** [Databricks](http://databricks.com)<sup>3</sup> (remote)  
**Positions held:** Resident Solutions Architect  
**Type of business:** Software Development/Big Data  
**Main activities and responsibilities:**
  - Working with customers on implementation of solutions based on the Databricks' Unified Data Analytics Platform

Technology stack: Apache Spark, MLFlow, Delta Lake, Scala, Python, SQL, Terraform, Go, ...
- **Principal Architect** at DataStax  
**Dates (from-to):** 09.2019–07.2020  
**Name and address of employer:** [DataStax](http://datastax.com)<sup>4</sup> (remote)  
**Positions held:** Principal 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.;
  - Delivering advanced trainings to customers;
  - Preparing statements of work, and other customer-facing documents;
  - Mentoring team members;
  - Working on improving internal processes;
  - Contribution to products, tooling, documentation, etc. in form of patches, JIRAs, reviews;
  - Pre-sales activity - discussion of possible architectures with customers, helping prepare sound technical proposals, etc.;
  - 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, ...

**Awards:**

  - President's club FY20 (2019)
- **Senior Solutions Architect** at DataStax  
**Dates (from-to):** 03.2019–08.2019  
**Name and address of employer:** [DataStax](http://datastax.com)<sup>5</sup> (remote)  
**Positions held:** Senior Solutions Architect  
**Type of business:** Software Development/Big Data  
**Main activities and responsibilities:**
  - Same as above;
- **Solutions Architect** at DataStax  
**Dates (from-to):** 01.2018–02.2019  
**Name and address of employer:** [DataStax](http://datastax.com)<sup>6</sup> (remote)  
**Positions held:** Solutions Architect  
**Type of business:** Software Development/Big Data  
**Main activities and responsibilities:**

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<sup>3</sup><http://databricks.com>

<sup>4</sup><http://datastax.com>

<sup>5</sup><http://datastax.com>

<sup>6</sup><http://datastax.com>

- Similar to above, with slightly smaller scope;

**Awards:**

- Execution Excellence Q2 FY19 (2018)
- President’s club FY19 (2018)

- **Senior Software Architect** at McAfee/Intel Security

**Dates (from-to):** 10.2016–12.2017

**Name and address of employer:** McAfee<sup>7</sup>, 33100 Paderborn, Germany

**Positions held:** Solution Architect

**Type of business:** Software Development

**Main activities and responsibilities:**

- Architecture of the **CDP (Cloud Data Protection)**<sup>8</sup> solution (implementing elements of CASB), involving multiple teams & products (18 teams, ~150–180 engineers). Communication with stakeholders, preparing the architecture, tasks definition & coordination for involved teams (very geo-distributed - from India to US West coast), evaluation of technologies & prototyping, implementation of some components (Java, C++, Clojure, Docker-based microservices, Elasticsearch, Kafka, Spark, ...);
- Development of URL & Content Categorization system using a 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, and 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<sup>9</sup>, 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**<sup>10</sup> offering & reporting in **Web Gateway Cloud Service**<sup>11</sup>.
- 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”

- **Software Architect** at McAfee, Inc. (*subsidiary of Intel Corporation*)

**Dates (from-to):** 03.2013–06.2014

**Name and address of employer:** McAfee, Inc<sup>12</sup>. 33100 Paderborn, Germany

**Positions held:** Software Architect

**Type of business:** Software Development

**Main activities and responsibilities:**

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<sup>7</sup><http://mcafee.com>

<sup>8</sup><https://www.mcafee.com/us/beta/public-betas/data-protection/cloud-data-protection.aspx>

<sup>9</sup><http://intelsecurity.com>

<sup>10</sup><https://www.mcafee.com/us/products/cloud-visibility-community-edition.aspx>

<sup>11</sup><https://www.mcafee.com/us/products/web-gateway-cloud-service.aspx>

<sup>12</sup><http://www.mcafee.com>

- 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<sup>13</sup>. 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<sup>14</sup>. 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<sup>15</sup>. 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).
  - **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/](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/](https://jet.su/en/services/information_security/);
    - \* **BeepayXP** – payment processing software for the Vimpelcom – large Russian Mobile Company (Data architect, server infrastructure architect, project coordinator);

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<sup>13</sup><http://www.mcafee.com>

<sup>14</sup><http://www.mcafee.com>

<sup>15</sup><http://www.jetinfo.com>

- \* **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 Physics 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:** Physicists (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, etc. Full list is available on a [separate page](#)<sup>16</sup>.

## Technical skills and competences

### Patents

- [Proxy Authentication for Single Sign-On](#)<sup>17</sup>. Status: Application

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<sup>16</sup><http://alexott.net/en/certificates.html>

<sup>17</sup><http://patents.justia.com/patent/20160205089>

## 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 25 years (mostly in Unix – Linux, Sun Solaris, HP-UX, FreeBSD);
- Java – 15 years (commercial & personal projects);
- Clojure - 10 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, ...
- NoSQL databases: Cassandra, 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:

- Apache Zeppelin (committer), Apache Tika, ...;
- 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 these & other OSS projects you can find on [github](#)<sup>18</sup> and [ohloh](#)<sup>19</sup>.

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<sup>18</sup><http://github.com/alexott>

<sup>19</sup><https://www.ohloh.net/accounts/alexott>

## Personal skills and competences

### Languages

- **Russian:** Mother tongue
- **English:** Good reading, writing & verbal skills
- **German:** Good reading, writing and verbal skills

### Social and organizational skills and competences

- Ability to work in multinational teams;
- 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.

### 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