## 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

• Lead Specialist Solutions Architect at Databricks

Dates (from-to): 02.2023-now

Name and address of employer: Databrics<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: Databrics<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:

 $<sup>^{1}</sup>$ http://databricks.com

<sup>&</sup>lt;sup>2</sup>http://databricks.com

- President's club FY22 (2021)

• Resident Solutions Architect at Databricks

Dates (from-to): 08.2020-now

Name and address of employer: Databrics<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<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<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<sup>6</sup> (remote)

Positions held: Solutions Architect

Type of business: Software Development/Big Data

Main activities and responsibilities:

<sup>&</sup>lt;sup>3</sup>http://databricks.com

<sup>&</sup>lt;sup>4</sup>http://datastax.com

<sup>&</sup>lt;sup>5</sup>http://datastax.com

<sup>&</sup>lt;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 geodistributed 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:

<sup>&</sup>lt;sup>7</sup>http://mcafee.com

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

<sup>&</sup>lt;sup>9</sup>http://intelsecurity.com

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

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

 $<sup>^{12} \</sup>mathrm{http://www.mcafee.com}$ 

- 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,

 ${\bf Russia}$ 

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/;
  - \* **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 Vimpelcom large Russian Mobile Company (Data architect, server infrastructure architect, project coordinator);

<sup>&</sup>lt;sup>13</sup>http://www.mcafee.com

<sup>&</sup>lt;sup>14</sup>http://www.mcafee.com

<sup>&</sup>lt;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

 $<sup>^{16} \</sup>rm http://alexott.net/en/certificates.html$ 

<sup>&</sup>lt;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>.

 $<sup>^{18}</sup>$ http://github.com/alexott

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

# Personal skills and competences

### Languages

• Russian: Mother tongue

 $\bullet$  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