

## EDUCATION

---

- **Moscow Aviation Institute** Moscow  
*Master in computer science and mathematics* *Sep. 1998 – Feb. 2005*

## EXPERIENCE

---

- **Nordea Bank** Copenhagen, Denmark  
*Expert Developer, Team Lead* *Feb 20015 - Present*

### *Achievements:*

- Leading 2 teams, 3 people each, mentoring junior programmers
- Worked in “hack team” to promote new technologies in department.
- Developed several crucial services from scratch. Participated in more than half of our department projects, sometimes took over leading to streamline project development.
- Developed alternative classes generation for Avro.
- Developed gRPC based, fault tolerant major trade bus system.
- Developed fault tolerant, limits monitoring system based on kafka and event sourcing pattern.
- Developed React UI for limits monitoring system.
- Drove internal cloud initiative to prepare applications to move to real cloud.
- Run technical demos about new technologies.
- Proposed few initiatives to improve cross team productivity:
  - \* Monolith git repository to share code across teams
  - \* use gRPC specification for cross team / systems communication.

*Tech stack:* Java, Kotlin, gRPC, Kafka, Protobuf, Avro, Docker, Cassandra, Redis, Mongo, Oracle, Hashicorp Consul, Vault, c-sharp, ActivePivot, React

- **Deutsche Bank** Moscow, Russia  
*Senior Software Engineer* *Apr 2012 - Nov 2014*

### *Achievements:*

- Developed from scratch several risk management system services.
- Developed business rules matching engine.

*Tech stack:* Java, Oracle Coherence

- **Luxoft** Moscow, Russia  
*Senior Software Engineer* *March 2011 - March 2012*

### *Achievements:*

- Developed low latency pricing system in java. It could process few hundred thousands records a second with microseconds latency in single thread. To achieve low latency we used multicast, cache friendly techniques ( primitive types), reduced number of system calls to prevent context switches, minimized copying of data.

*Tech stack:* Java, NIO, Multicast

- **Deutsche Bank** Moscow, Russia  
*Senior Software Engineer* *Apr 2005 - Nov 2010*

### *Achievements:*

- Developed from scratch several crucial trading systems.
- Developed order management system based on state machine.
- Developed declarative testing framework for order management system

*Tech stack:* Java, JMS

## SIDE ACTIVITIES

---

- Developed trading strategy backtesting/analytical framework in kotlin, c-sharp, python.
- Made AI research for trading strategies using python, pandas, numpy, skikit-learn libs.

## PROGRAMMING SKILLS

---

- **Languages:** Java, Scala, Python, c-sharp, SQL
- **Technologies:** Docker, Kafka, Mongo, gRPC, Avro, Protobuf, Cassandra, Hashicorp Consul, Vault
- **Other things:** Unix command line, CS knowledge, git

## FEW TIPS THAT I APPLY AT WORK

---

- Complexity/entropy of any system tend to increase. This is crucial to control it continuously by refactoring and state removal.
- People are like threads in computers: context switches greatly slow down those productivity, so you shall minimize people sidetracking. Cross teams communication have to be covered by API contracts if possible.
- OOP need to be used carefully and in limited scope, especially by junior programmers, because it is stateful and complex by design.
- Testing : you need to shape your application for easy testing, otherwise people will try to avoid tests writing.