

Mikhail Mitkevich

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EDUCATION

MSC APPLIED MATH

MOSCOW INSTITUTE OF PHYSICS
AND TECHNOLOGY (MIPT)

2002 | Moscow, Russia

Cum. GPA: 4.8 / 5

PHD MECHANICS

MOSCOW INSTITUTE OF PHYSICS
AND TECHNOLOGY (MIPT)

2006 | Moscow, Russia

LINKS

Github:// [mmitkevich](#)

LinkedIn:// [mmitkevich](#)

SKILLS

PROGRAMMING

Over 5000 lines:

C#•java•C++•python•x86

Over 1000 lines:

F#•Matlab•Javascript•PL/SQL

Familiar:

PostgreSQL• R • GPGPU/OpenCL

DATABASES

Recent use

Oracle • InfluxDB • RethinkDB

TimeBase • LMDB

Familiar:

Redis • LevelDB • Vertica

MySQL • SQL Server • SQLite

TECHNOLOGIES

Design Patterns

OOP•FP•FRP•CEP

Hardware

x86_64•cachelines

TEAMWORK

git•github•jira

OS

Ubuntu Linux

ip,ipsec•vpn•proxmox•kvm

Windows Server

basic admin

QUANTITATIVE SKILLS

MATH

- linear algebra
- stochastic calculus
- machine learning
PCA•SVM • k-means
MCTS (monte carlo tree search)

NUMERICAL ANALYSIS

- numpy • matlab • R

FINANCE

- stochastic processes (unit roots, cointegration tests)
- options pricing (local volatility)

EXPERIENCE

STOCKSHARP.COM | SOFTWARE ENGINEER

2010 - Present | Moscow, Russia

- Developed realistic high-frequency algorithms backtester for StockSharp.com project
- Used above tester for market-making strategies evaluation.

ALCATEL-LUCENT | SOFTWARE ENGINEER

2008 - Present | Moscow, Russia

- Automatic speech recognition and text to speech integration project (VXML, MRCP)
- Enhanced customer segmentation reporting and analysis features for interactive voice response platform of tier one Russia mobile operator. (Java, Tomcat, Oracle)
- Delivered workforce schedule optimization solution for large-scale call center business utilizing Erlang C model and legal labor laws constraints (Genesys WFM, Java)

HEDGE FUND | QUANTITATIVE RESEARCHER

2007 - 2008 | Moscow, Russia

- Research of volatility trading strategies in U.S. markets

FORECSYS | QUANTITATIVE RESEARCHER

2006 - 2007 | Moscow, Russia

- Applied machine learning algorithms to stock portfolio optimization problem (random search, reinforcement learning)
- Addressed over fitting problem by using in-sample and out-of-sample correlation analysis
- Research of volatility trading strategies in U.S. markets

ISP RAS | RESEARCH ASSOCIATE

2001 - 2006 | Moscow, Russia

- Developed custom IDE/debugger for custom DSP chip software simulator and FPGA emulator. (Visual C++/MFC, GNU toolchain, dwarf2)
- Manually optimized FIR/IIR filters using specific SIMD instructions providing 5x performance gain over reference implementation.

