

# Dmitry Dvoynikov

Software developer  
Berlin, Germany

[dmitry@targeted.org](mailto:dmitry@targeted.org)  
<https://targeted.org>  
<https://www.linkedin.com/in/targeted>  
<https://github.com/targeted>

## Recruiter's summary

software design architecture development testing integration maintenance troubleshooting  
security usability reliability performance optimization backend service framework API database  
network embedded low-level hardware cryptography blockchain  
C C++ Python Java JavaScript Ruby assembler VHDL relational SQL PostgreSQL MSSQL NoSQL  
MongoDB OLTP OLAP TCP VPN CA PKI HSM MCU FPGA Windows Linux FreeBSD Git Docker

## A more personal introduction

I am a programmer, and I love my job. I have 25 years of experience building software for money and a few years more of programming for fun before that.

Over the years I've worked on a lot of interesting projects (some award-winning even), building services, frameworks, databases, applications and web sites mainly in financial area with focus on security and cryptography.

I've held a lead position a few times, leading a team of a couple of other developers, but no matter the title, I'm always trying to lead by example and work closely together.

Although my positions were invariably some kind of "software developer", I always assumed a large part of product ownership, from the overall design and architecture down to the smallest physical details, crimping and soldering if necessary, and certainly enjoyed such autonomy.

Today I am a precise analytical pragmatist with "let's get it done (and here is how)" mentality, caring for the project, striving for reliability and robustness through simplicity, well-defined architecture, high quality standards and perfecting things through perpetual improvement.

## Experience

Nov 2021–present    **Lead Crypto Engineer, HSM** at [Finoa](#), Berlin

As a part of the team in one of the Germany's largest crypto banks, my job is to design, build and protect a security framework around the HSM devices, write HSM code for the blockchains, and provide all-round security expertise.

★ The framework has passed two (so far) dedicated pentests from [Cure53](#), with conclusions like "unanimously commendable opinion" and "robust overall verdict".

May 2021–Oct 2021    **Software Developer** at [Reserve](#), USA (remotely)

The single project that I built here was the "OFAC replacement" - algorithm, implementation and network service for fuzzy name matching, to be used by the compliance team in the course of KYC approval process.

**2017–Apr 2021 Technical Lead at [3T Software Labs GmbH](#), Berlin**

Developing "Studio3T" – the best GUI tool for MongoDB. Designed and implemented new features, refactored the existing code, reviewed others' work. Focused on SQL to NoSQL translation, query plans, security and architecture.

**2015–2016 Software Developer at [FinReach GmbH](#), Berlin**

Developing a web application for switching bank accounts in a FinTech startup within a large Berlin incubator HitFox.

**2009–2015 Lead software developer at [Infosysco](#), Russia**

Designed and developed a proprietary online banking system and related crypto security products (classic PKI w/operational procedures, digital signatures, TLS stack, web and desktop app), worked on integration of various systems, such as credit card processing and online payments.

★ Our product was rated the best online banking solution in Russia in [2013](#).

**2011 Participated in Intel Parallel Programming contest “Acceler8”**

Not a job per se but worth mentioning. A contest in parallelizable multi-core computations.

★ My solution ended up to be the fastest of the “industrial” kind. Unfortunately, a flaw in test data generation made it possible for the winners to work around having to parallelize computations efficiently and have direct single-threaded solutions instead. The story was so intriguing that I wrote a [post](#) about it (in Russian).

**2004–2009 Lead software developer at [Severnaya Kazna](#), Russia**

Working for a bank which was at the time known as the most technologically innovative in Russia, designed and developed a proprietary online banking system and related crypto security products, worked on integration of various banking systems.

★ Our product was rated the best online banking solution in Russia in [2006](#) and [2007](#).

**2006 Remote consultant/contractor at ScriptLogic Inc, USA**

Designed and developed a product for tunneling TCP through HTTP for the purpose of defeating firewalls and proxy servers. Later part of [Desktop Authority](#), a secure desktop management software suite.

**2001–2004 Lead software developer at [CIFT](#), Russia**

Designed and developed proprietary financial systems, such as remote banking, stock accounting and a massive OLAP budgeting framework for the local ministry of finance.

**2000–2001 Software developer at [SSI Micro](#), Canada**

Built web sites for customers, written software for controlling various satellite networking hardware remotely.

## 1998–2000 **Software developer** at Uralvneshtorgbank, Russia

Built an interactive bank [web site](#) with a back-end connected to various information sources inside the network.

## 1996–1997 **Database software developer**, Russia

Designed and developed a database application for keeping records on archaeological sites and artifacts, with media, such as photos and maps.

## Education

Bachelor's degree in mathematics, graduated in 1998 from the [Urals State University](#) in Ekaterinburg, Russia. Short-term post-graduate study in Russia-specific cryptography and information security.

## References

*“Dmitry is one of those rare developers that are incredibly strong both algorithmically as well as architecturally. He has profound knowledge across the board in software engineering and his level of professionalism has always been exemplary. But perhaps most importantly Dmitry is a very pleasant person that I have had the pleasure of having countless thought-inspiring conversations with over the years.”*

**– Dr. Thomas Zahn**

Co-Founder and Managing Director at 3T Software Labs GmbH

*“I have worked with Dmitry on multiple projects, and he always exceeded our expectations, he's one of the best experts in the field, it's really easy to work with him and Dmitry always bringing his 'A' game.”*

**– Rafi Nagli**

Director of Product Development at ScriptLogic

*“Dmitry is one of the best engineers I have pleasure to work with. In many projects he has been able to successfully think through the most complex business processes, architect comprehensive frameworks and apply existing technologies in most right way.”*

**– Mikhail Sidorov**

Technical Director at NPO Sapfir (CIFT)

*“I would heartily recommend Dmitry for any technical project, firstly for his technical skills, secondly for his professionalism, and lastly for his genuine warmth, patience, well-rounded education, and genuine interest in the world.”*

**– Jeremy Childs**

Director of Development at SSI Micro