

# EVGENY NAZAROV

## CONTACTS

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## SUMMARY

I am a full-stack software engineer specializing on the Enterprise-level, large-scale applications development, having an expertise and experience in all aspects of the software products development, delivery and lifecycle (15+ years in total). While my most recent experience is associated with C# / .NET technology stack, I am open for any other technology and language if it fits better for specific product or platform.

## WHY, WHEN AND WHERE

My current contract ends on 5 July 2019, looking for a new challenge. While I'm ready to travel, I'm not considering relocation – only opportunities around Brisbane area, Queensland, Australia will be considered; I am a permanent resident in Australia, operating through Pty Ltd company.

## WHAT

Passionate to drive Software Architect / Solution Architect as well as Principal / Senior Software Developer roles. Having a broad experience, I will be particularly interested in the web-app development using high-level languages like C# or C++, and front-end written using web-based technology stack: (Razor/React/Angular), as well as would be interested in R&D associated with massive parallel computing (e.g. CUDA) and 3D graphics (DirectX11/12). Like to think big, so enterprise-scale systems are in preference.

## EDUCATION

2001 – 2007

### **Saint Petersburg State Institute of Technology (Technical University)**

Master of Computer Science. Computer Aided Design Systems and Control Systems specialist.

## KEY TECHNOLOGIES

Languages:

- **Expert** in C# and .NET/.NET Core (9+ years, most recent);
- **Proficient** with C++ / Managed C++ / C (nearly 8 years total);
- **Moderate** in F#, Java, JavaScript, Delphi, Basic, LUA, Boo;

Front-end:

- **Expert** in Desktop: WPF / WinForms / MVVM
- **Expert** in Web: Angular 2+ / React / MVC / HTML5 / jQuery / Bootstrap
- **Moderate** in Mobile: Xamarin / Ionic / React Native

Back-end:

- **Expert** in Web: ASP.NET / ASP.NET Core / NancyFX
- **Expert** in CG: DirectX 9-12 / OpenGL / SlimDX
- **Expert** in scalability: Akka.Net / MassTransit / ActiveMQ / MSMQ / Nirvana
- **Expert** in DB: MS SQL 2008+ / Redis / Elastics / Neo4j
- **Expert** in ORM: EF (EF Core), Dapper, NHibernate
- **Expert** in TPL / SignalR / Topshelf
- **Moderate** in GPU Computing: CUDA / OpenCL

Interop:

- **Expert** in XML / JSON / Protobuf / Cap'n Proto / MessagePack
- **Expert** in IoC: Autofac / Unity / Windsor / TinyIoC / StructureMap / Ninject
- **Expert** in logging: Serilog / NLog / log4net
- **Proficient** in Roslyn: StyleCop / Custom analyzers development

Testing and quality:

- **Expert** in unit testing: NUnit / MSTest / xUnit
- **Proficient** in Integration / Component testing: BDDfy / SpecFlow
- **Expert** in mocking framework: NSubstitute, Moq / NMock / RhinoMocks
- **Expert** in assertion frameworks: FluentAssertions / Shouldly

## DEV-OPS ADMINISTRATION EXPERIENCE

- VSTS / Trello
- Atlassian: JIRA / Bitbucket / FishEye + Crucible / Bamboo / Confluence / HipChat
- JetBrains: TeamCity / YouTrack / Upsource
- Hudson / Jenkins
- ClearCase / Perforce / CVS / SVN / TFS / GIT
- VirtualBox / Hyper-V

## KEY TOOLS IN USE

- Microsoft: Visual Studio 2017/2019 (C#/C++), MSBuild/dotnet CLI, PowerShell, VS Code
- JetBrains: ReSharper, dotTrace, dotPeek, dotCover, dotMemory, Rider
- Atlassian: SourceTree
- GitHub.org / Bitbucket.org

## WORK HISTORY

February 2019 – Present (5 months, contract)

### **Senior Software Engineer at Console Group**

<https://www.console.com.au/consolepay>

Console Gateway is property management software that supports property managers in managing their portfolios from end-to-end. It handles a mix of residential, commercial and holiday letting all in the one trust accounting database.

Console Pay is an automated payments capability that will provide Principals, Property Managers, property owners and tenants with a range of benefits. Console Pay can streamline agency rent receipting processes by giving the power to automate cash flow for landlords and provide convenience for tenants.

As part of this assignment I extended the Console Pay system with the invites facility, so the Property Agents could send invites for eDDR. Once eDDR is completed by the invited tenant, payments are automatically reconciled with the records in the Gateway.

Invites are sent via e-mail or SMS, and also include URL shortening service integration.

### **Contribution**

- Integration with Mailgun service (via REST, for e-mails)
- Integration with Edgility service (via REST, for SMSes)
- Integration with Rebrandly (via REST, for URL shortening)
- The above has been reverse-proxied via NGINX for security reasons.
- Further integration with external system (via REST, Ezidebit eDDR)
- Assistance with ongoing Console Pay development/bugfixing

### **Technologies**

- .NET stack: 4.7+, WPF
- Kibana
- AWS
- Ezidebit API

### **Achievements**

- Every successfully integration is an achievement on its own.

July 2018 – February 2019 (6 months, contract)

## **Senior Software Engineer at MPower MSL**

<https://mpowermsl.com/>

MPower MSL is a global leading company in the Venue Management, Membership, and Point of Sale software sector.

As part of this assignment I had two major streams of work:

- To assess and suggest options for the Vantage software modernization, which they received as part of the Verteda acquisition.  
<https://www.verteda.com/solutions/workforce-management>

Verteda is a workforce management system with a rich feature set, however it was created 20 years ago, and uses partially decommissioned technology stack (C++, COM, Remoting). As part of this work stream, I created a prototype that was able to communicate with existing legacy software and exposed web API (ASP.NET) which was used by the modern web user interface (Angular 6). The communication held two ways, i.e. any changes made in the legacy system were propagated into modern UI and vice versa (via SignalR).

- To modernize and convert existing SOAP APIs into REST API

As part of their ongoing business, MPower MSL offers API access for Point-of-Sale management. This API exists in the form of SOAP and serves as an adapter for downstream SOAP APIs (like SwiftPOS/InfogenesisPOS). An implementation of these adapters was extracted into separate modules; single target framework (.NET) was replaced by multiple target frameworks (.NET/.NET Standard). As a result of this refactoring, the new REST API is now hosted using ASP.NET Core with all existing implementations in place.

### **Contribution**

- Modernized UI prototype that is bounded to the legacy system with no legacy system change (ASP.NET/Angular)
- SOAP API to REST API conversion, including target framework change from .NET to .NET Core
- Integration of all API sweets like Swagger

### **Technologies**

- .NET/.NET Core stack
- Angular6 / TypeScript
- AWS/Azure

### **Achievements**

- Two-way communication pipeline: C++ ⇔ COM ⇔ .NET ⇔ Angular; quite challenging to achieve if you cannot recompile/debug the legacy software.

October 2017 – July 2018 (10 months, contract)

**Senior Software Engineer at Console Group**

<https://www.console.com.au/consolepay>

Console Gateway is property management software that supports property managers in managing their portfolios from end-to-end. It handles a mix of residential, commercial and holiday letting all in the one trust accounting database.

Console Pay is an automated payments capability that will provide Principals, Property Managers, property owners and tenants with a range of benefits. Console Pay can streamline agency rent receipting processes by giving the power to automate cash flow for landlords and provide convenience for tenants.

**Contribution**

- Console Pay development
- Business Analysis
- Integration with external system (Ezidebit)

**Technologies**

- .NET stack: 4.7+, WPF
- Kibana
- AWS
- Ezidebit API

**Achievements**

- Introduced solely developed UI framework to ease UX development.

July 2017 – October 2017 (4 months, short-term contract)

### **Senior Software Engineer at Simple Technology**

<https://simple.io/>

Simple platform helps plan, review and optimize marketing activities to deliver exceptional customer experiences across every marketing channel.

#### **Contribution**

- Requirements gathering
- Requirements analysis
- System design
- System implementation
- System deployment

#### **Technologies**

- Full .NET stack, including ASP.NET 4.6
- AWS
- React
- Golang

April 2017 – July 2017 (5 months, contract)

### **Senior Software Engineer at Public Safety Business Agency (PSBA)**

<http://www.psba.qld.gov.au>

ITAS (Intelligent Traffic Analysis System) performance optimization. Through the variety of analysis being taken, consequent iterative optimizations on the database, server facade and client app, the performance of ITAS' rostering sub-system has improved more than 4 times.

#### **Contribution**

- Database optimization
- Service infrastructure optimization
- Client-side optimization
- Codebase refresh

#### **Achievements**

- For certain features, loading/refresh times has been reduced more than 4 times;
- To achieve better performance, both database, service infrastructure (server) and client (desktop application) had to be improved;
- Codebase has been refreshed: upgraded C# language, .NET framework version, integrated support for NuGet packages, etc.

August 2016 – April 2017 (8 months, contract)

## **Solution Architect at GIS People Pty Ltd**

<https://disclosures.ecq.qld.gov.au/>

Designed and delivered complex fully-functional web-app using most recent Microsoft technology stack (Azure / .NET Core) in extremely short terms. First “preview” release within 3 months, fully functional release within next 3 months and 2 more months to establish stable continuous integrations of the new features according to Agile methodologies.

### **Contribution**

- Requirements gathering
- Requirements analysis
- System design
- System implementation
- System deployment

### **Technologies**

- Full .NET Core stack: ASP.NET Core / MVC Core / EF Core
- Azure as a hosting platform

### **Achievements**

- A ready-to use proof of concept from the scratch in 3 months.
- A ready-to use application in next 3 months.
- Fully defined continuous integration & delivery pipeline according to Agile methodologies
- Proudly introduced by Anastacia Palaszczuk (<https://goo.gl/5wGIBv>)

January 2015 – August 2016 (more than 1 year 8 months, fixed-term employment)

## **Senior Software Engineer at Schneider Electric Pty Ltd**

<http://www.schneider-electric.com.au/en/>

*Ampla* is a Manufacturing Execution System (MES) targeted for the mining industry, empowering businesses to reduce costs and improve production efficiency, performance and profitability through operations analysis (data mining) and optimization.

### **Contribution**

- Prototyping, design and implementation of new features as a whole: from front-end to back-end;
- Fixing, refactoring and hardening the quality of existing features;
- Features/epics/stories/tasks breakdowns, estimations and prioritization advises;

### **Technologies**

The capacity involves the full stack of .NET technologies: (C# 6.0/.NET 4.6.1)

WCF (+.NET Remoting) / WPF (+MVVM) / WinForms (+MVP) / ASP.NET (+MVC) / Autofac / Reactive Extensions / Serilog / Akka.Net / MassTransit / MQMQ / ActiveMQ / Protobuf / NUnit / BDDfy / CQRS / chain-of-responsibility / event-driven / SOLID / DRY / KISS

### **Achievements**

- Had a personalized "Most Innovative Award 2015" in late 2015;
- Was a top performer (role model) by the end-year performance review;
- Introduced NuGet, solely replaced existed binary dependencies by their packages (introducing custom packages for those were missing);
- Introduced SOLID principles for the team;
- Introduced Unit Testing – a testing of units (classes) in isolation, as opposed to the existed integration tests;
- Solely refactored a huge part of the back end, introducing the actor model (akka.net);
- Actively contributed into few other massive improvements, with the purpose to adopt CQRS, event-driven approach and chain-of-responsibility pattern.



July 2014 – December 2014 (6 months)

## **Senior Software Engineer at Zetron Australasia Pty Ltd**

<http://www.zetron.com/>

Zetron has been designing and manufacturing mission-critical integrated communications systems since 1980. Zetron's new *MAX Dispatch* console system is a new level of the radio dispatch systems, which became popular both on Australian and global markets.

### **Contribution**

- Prototyping, design and implementation of new features as a whole: from front-end to back-end;
- Fixing, refactoring and hardening the quality of existing features;
- Assistance with the technical/implementation decision making;

### **Technologies**

C# 5.0 / .NET 4.5 / WPF (+MVVM) / Microsoft Unity (Application Block) / Reactive Extensions / MSTest / SOLID;

### **Achievements**

- Introduced SOLID principles for the team;
- Introduced Inversion of Control – compared various IoC containers with the focus on performance and demonstrated results to the team for their final decisions.
- Introduced Unit Testing – there was no tests around the project in principle;
- Helped transform the waterfall development process into scrum;

August 2010 – June 2014 (3 years 10 months)

**Leading Software Engineer / Assistant Vice President at Deutsche Bank**

<http://www.db.com>

Deutsche Bank is a leading global investment bank. The next generation *Autobahn* FX trading platform is currently one of the most fastest, reliable and modern trading platforms on the market.

**Contribution**

- Lead the team of 5 developers and 1 QA;
- Prototyping, design and implementation of new features: front-end and API considering back-end;
- Features/epics/stories/tasks breakdowns, estimations, prioritization and execution;
- Mentor team members and assist with their careers within the Bank;
- Release management, including releases to Production environments;
- Interviewing people: phone and on-site, Associate and AVP levels;
- Onboarding: adopting new developers for development procedures.

**Technologies**

C# 5.0 / .NET 4.0-4.5 / WPF (+MVVM) / Microsoft Unity (Application Block) / Reactive Extensions / NUnit & SpecFlow / SOLID

**Achievements**

- I had 3 end-year performance reviews in total and always was in a top 10% tier;
- Has been promoted from Associate to Assistance Vice President in the middle;
- Managed to find a proper balance between people management and technical leadership;

April 2010 – August 2010 (4 months)

### **Software Engineer at Skyros Corp**

<http://skyros.ru> (only in Russian)

Skyros Corp is a leader in Integrated Security Systems entire Russia and CIS. *VideoNet* allows their clients configure the system as well as perform the actual security service through surveillance and access control (HID).

#### **Contribution**

- Prototyping, design and implementation of new features as a whole: from front-end to back-end;
- Fixing, refactoring and hardening the quality of existing features;

#### **Technologies**

C# 4.0 / .NET 3.5 / WPF (+MVVM) / Managed C++ / C++

#### **Achievements**

- Provided expertise in C# 4.0 and .NET Framework by organizing the application architecture (initially was the only C# developer, others were C++).
- Provided expertise in WPF and MVVM patterns.
- Delivered initial framework for application with reusable components and established initial architecture

January 2008 – April 2010 (2 years 3 months)

### **Software Engineer at Geolink Technologies / Applied Materials**

<http://geolink-technologies.com/> , <http://www.appliedmaterials.com/>

Geolink Technologies LLC provides a wide range of R&D and consulting services: design and optimization of various technological processes in semiconductor and chemical industry, high-end software development. As a contractor of Applied Materials I worked on CGA (which stands for Common Ground Architecture) platform and RF3 for Sokudo. Project is a HMI for their SCADA system used by semiconductor manufacturing tools developed by Applied Materials.

#### **Contribution**

- Prototyping, design and implementation of new features;
- Fixing, refactoring and hardening the quality of existing features;

#### **Technologies**

C# / .NET / WinForms / WPF / Managed C++ / C++

#### **Achievements**

- Solely delivered experimental/sandbox application to roadmap a smooth migration path from WinForms to WPF.

January 2007 – December 2007 (1-year contract)

**Software Engineer (C++) at HBM Virtual World / CDS Pty Ltd**

<http://hbm.spb.ru/?page=main&lang=en> , <http://OIGY.co>

HBM Virtual World LLC was providing consulting services in the software development area. *MyVirtualHome* (currently known as *OIGY*) is an interior design software originally developed by Australian company Creative Designer Software Pty Ltd (aka CDS Pty Ltd). Application uses AuranJet game engine to display 3D interiors in real time allowing users to walk through their house.

**Contribution**

- Prototyping, design and implementation of new features;
- Fixing, refactoring and hardening the quality of existing features;

**Technologies**

Microsoft Visual C++ 6.0 / AuranJet game engine / Windows API

**Achievements**

- Delivered sandbox implementation of automated wiring system (to perform automated electricity wiring, plumbing and drainage entire house) according to regional standards (sandbox has supported both Australian and Russian).

February 2006 – August 2006 (6 months contract)

**Software Engineer (C++) at Adamant Multimedia**

Adamant Multimedia was a game development company with a strong focus on first person shooter games. This was a contract offer to research and develop experimental artificial intelligence for non-player characters (NPC) in a *Cool Gathling* game. Artificial intelligence was consisting of multi-layer finite state machines mixed with neural networks with limited capability of supervised and unsupervised learning, and was configurable via LUA scripting language.

**Contribution**

- Prototyping, design and implementation of the configurable framework to build, train and explore artificial intelligence behaviors of non-player characters in first person shooter games.

**Technologies**

Microsoft Visual C++ 6.0 / MFC / boost / Windows API / LUA

**Achievements**

- Delivered a configurable framework to build, train and explore artificial intelligence behaviors of non-player characters in first person shooter games.

November 2002 – May 2005 (2 years 6 months) (part-time)

## **Software Engineer (C++) at SPBEC**

<http://spbec.ru/en/>

For over 20 years SPBEC have been creating and implementing the best integrated solutions in the field of industrial automation, power supply and construction. *Drive Status Controller* is an application that allows their users to control, track and record high-powered motor parameters (power consumption/rpm/torque etc.).

### **Contribution**

- Prototyping, design and implementation of new features;
- Fixing, refactoring and hardening the quality of existing features;

### **Technologies**

Borland C++ 6.0 / VCL / boost / Windows API

### **Achievements**

- I was the sole owner of this software (architecture, development, GUI, help, distribution packages).
- Five versions are developed and released.
- Full context help system is available.
- Distribution package is available (aka setup.exe).
- Still in production

## **PROFESSIONAL INTERESTS**

Very passionate developer preferring stay close to a code – doing a lot of coding for fun in free time.

Active user of Pluralsight (<https://www.pluralsight.com/>), where I find inspiration for coding for fun projects.

Have recently posted various technical articles, the last one was about Combinatorial Unit Testing ([www.codeproject.com/Articles/1102319/More-unit-testing-with-less-code-combinatorial-uni](http://www.codeproject.com/Articles/1102319/More-unit-testing-with-less-code-combinatorial-uni)).