

Daniel Kornev  
[daniel@kornevs.org](mailto:daniel@kornevs.org)

## GOAL

I intend to invent technologies and products in which users of the XXI century will **learn and understand themselves** and **the world around them**.

## SOFTWARE ENGINEERING & RESEARCH



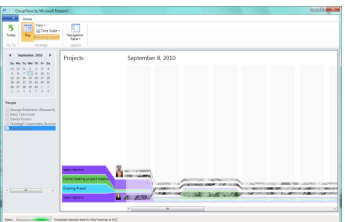
**Zet Universe Beta (software architect), 2014-2015.** Built semi-automated Dashboard showing **aggregated communications grouped by projects from different data sources**. Founded product on Pre-Beta work; scaled up the product to support 3rd party data sources integration (Dropbox, Outlook.com, Office 365); introduced **semantic pipeline for async incoming data streams processing**. Wrote **own visual clusters identification algorithm** (nearest neighbor). Integrated Lucene.net with IFilters for full-text indexing & search, added and **significantly extended** word co-occurrence keyphrase extraction algorithm to **identify semantic cores** behind visual clusters. Re-added **visual semantic tagging** (color tags, read/unread, importance). ~500K lines of code (152K lines of code removed, ~500 commits, 2 refactorings). 1.5 year effort.



**Zet Universe Pre-Beta (lead engineer), 2013.** In collaboration with team of 3 re-designed the product from scratch; UI built on WPF using MSR Zoomable Canvas technology and our own **re-invented topographic cluster visualization**; backend storage changed to individually stored JSON files for sync using Dropbox/Box/SkyDrive. 5 months effort.



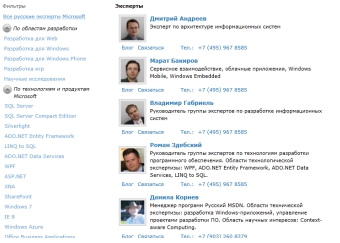
**Zet Universe Alpha (software architect), 2012-2013.** Designed architecture and coded Alpha version of the visual information organization software for PMs in C# using WPF; designed and built topographic cluster visualization as key element of product experience. Introduced **visual semantic tagging** (e.g., importance, keywords) and **filtering** user experience. Built **Semantic Web-like backend database** in SQL Server 2012 with **spatio-temporal support**; built Web Services infrastructure to make client-agnostic backend (e.g., client could be a WinRT/Silverlight/WPF application, or a single page web application). Built **prototype sync infrastructure** working on top Azure cloud services together with **Azure Service Bus** infrastructure. 1,5 year effort.



**Microsoft Research (internship), 2010.** Designed and prototyped **Group Awareness Visualization** add-in for Office Outlook and Microsoft Exchange. User interface designed in WPF, code written in C#. Used VSTO for Outlook UI integration, and **Exchange Web Services** for efficient data sharing and organization instead of relying on slow Outlook MAPI. 3 months effort.



**Microsoft (part-time work), 2009.** Designed and built **Windows Canvas** (later known as "Project Universe") - an innovative zoomable user interface for visual information organization, together combined as the Digital Work Environment - in collaboration with **Office Labs** and **Office Labs Envisioning** team. Used WPF for UI design, C# as programming language, SQL Server CE as database, Entity Framework as ORM, VSTO for Outlook integration, Win32 APIs (Shell, NLA, etc.). 3 months effort.



**Microsoft Russia (program manager lead), 2009.** Designed and built “Find an Expert” feature for Russian MSDN website to surface Russian DPE technology experts to Russian developer audience. Used Silverlight as UI framework and C# as programming language.

Won the **Microsoft CEE CPE Award** for reaching out to customers and connecting them with the experts they’ve been looking for. 1 month effort.



**Moscow State University of Electronics and Math (Master thesis), 2008.** Designed and built project aimed at collecting contextual information (e.g., open apps, battery/network/sound status, location, etc.) for building context-aware applications. A prototype context-aware application was built using WPF as UI framework, C# as programming language, SQL Server 2008 with Base4.Net (object-relational platform designed by Alex James; he’s now PM in ADO.NET Entity Framework team). Used Win32 APIs (Shell, NLA, etc.). Product showed Windows Live Messenger and Skype

# PRODUCT & PROGRAM MANAGEMENT

## PRODUCT MANAGEMENT



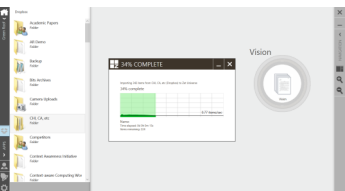
**Zet Universe (CEO/product manager), 2012-2015.** Conducted market analysis and research of existing competitive solutions addressing multitasking and management of complex projects. Conducted **30+ customer interviews** with PMs, CEOs, designers from various US and Russian companies ranging from startups and small businesses to mid-size and large enterprises.

With our product we aim to **save up to 4 hours** per day of **PM work time** by semi-automating project information aggregation and visualization in a form of dashboard.



Created and led a **professional team** consisting of highly talented engineers, software architects, and experts in sales, marketing, and research from ex-colleagues from Microsoft. Brought advisors from a variety of top-level companies and organizations including **Microsoft, Autodesk, Fidelity Investments, University of Washington,** and others.

Defined, designed, and developed a system that enables its users to organize, manage, and display project-related information in a spatial way coming from different data sources.

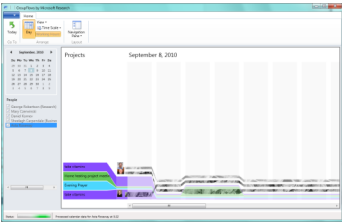


Our company was recognized as **Top50 European Startup** (Pioneers Festival, 2012), **Top30 Idea for Intel Ultrabook UX Contest** (2012), **Top 4 Russian startup** at Mass-Challenge Accelerator (2013).

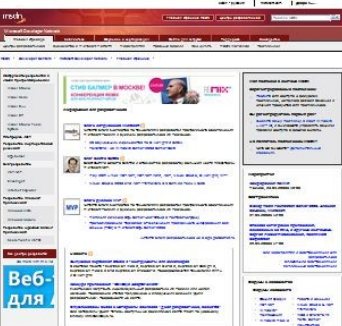
Our company got **seed round** from recognized Russian venture firms, including Altair and LETA Capital (2013). 3 years effort.



**Microsoft (collaboration), 2011.** Conducted market analysis and brief user research to identify key new directions for **Kinect for Windows scenarios**. Created **information input & output heat map** to highlight differences in human-computer interaction when using devices of different form factors (mouse/keyboard/joysticks/touch/voice/3D air gestures/pen/sensors). Defined **scenarios** for different audiences, including **information workers, consumers & education, manufacturing,** and **aero-space**. 1 month effort.



**Microsoft Research (internship), 2010.** Conducted analysis of existing solutions, led user research interviews with **5 Microsoft employees**; defined, designed, and developed a system that provides an innovative way to tag and visualize workday by projects. The program aimed at scenarios that addressed the calendar and location awareness needs of distributed teams. 3 months effort.



**Microsoft Russia (program management lead), 2008-2010.** Led **Russian MSDN** website migration to the MSDN 2.0 platform (requirement analysis and specification design, executed full site migration in collaboration with Redmond team). This included designing the new MSDN portal, developing new content, developing new DevCenters focused on specific products, publishing special documentation into **Russian MSDN Library** (e.g., localized Beginner's Guide to Programming in C# and Visual Basic).

**Established MSDN Blogs** in Russia. **Founded MSDN Forums** in Russia.

Won the **Microsoft Ship-It Award** (2009) for MSDN 2.0 migration project.

Led a team of 5 site managers, editors, engineers, and designers. 2,5 years effort.

## PROGRAM MANAGEMENT – DEVELOPER RELATIONS, SITE MANAGEMENT, ETC.



**Google Russia (technical program manager II), 2010-2011.** Established Google Developer Relations organization in Russia that oversees Google technology adoption in several Eastern European and Central Asian countries. Built a **Developer Relations** strategy for Russia in liaison with local & international Product Groups & marketing teams. Worked with **major Russian ISVs** to enable development of their products on top of Google technology, such as Google Apps, Translate, Maps, and others. Organized several Developer-focused events, including **Google Developer Days 2011**, **Google DevFest 2011** (focused on Context-aware systems); grew DevRel online channels. Rejuvenated **Google Technology User Groups** (GTUGS) in Russia and Ukraine; helped establish new GTUGs in two other CIS countries. 1 year effort.



**Microsoft Russia (program management lead), 2008-2010.** Lead **Russian MSDN & TechNet team** of 5 (site managers, designers, forum engineers, editors).

Established content partnerships with internal (**Steven Sinofsky** and his Engineering Windows 7 blog, Russian product marketing teams) and external (TheVista.ru) organizations.

Grew MSDN Russia user base **from 40K to 500K unique monthly visitors in first two years**. 2,5 years effort.

## TECHNICAL EVANGELISM



**Independent specialist, 2008-2015, & Microsoft Russia (developer evangelist), 2007-2008.** Evangelized Microsoft technologies both as independent specialist and Microsoft developer evangelist (2007-2008). Gave numerous talks on designing and building software based on Microsoft technology, as well as on internals of Microsoft products and platforms, including but not limited to:

Client Stack: **WPF, Windows Forms**

Data Layer: **ADO.NET Entity Framework, LINQ to SQL, WinFS, SQL Server**

Search & Cortana: **Windows Search, Bing Platform** (public information)

## EDUCATION

PhD in Applied Computer Science/HCI, **State University - Higher School of Economics**, Moscow, Russia (2009-2011, Unfinished)

**Thesis:** *Modeling human-computer interface design of intelligent personal assistant based on context-aware computing systems.* I continued my work started with masters thesis as well as work on Windows Canvas project to bring both a new architecture for intelligent personal assistant (which can learn after user) and new user design for knowledge organization.

**Studied** philosophy of science, human-computer interaction design, data integration and analysis, information visualization.

MS in Computer Science, **Moscow State University of Electronics and Math**, Moscow, Russia (2003-2008)

Graduated with **4.83 GPA (of 5)**.

**Thesis:** *Research of opportunity to develop context-aware applications depending on the information environment.* I built context-aware computing platform for Windows Vista & Windows 7 that allowed applications to adapt to context changes. A prototype application allowed user to see work-related contacts from Lync while being at work, and private contacts while being at home.

**Studied** software coding in C#, databases, project management, math, physics, electrical engineering.

Received **Best Student Award** for 1st and 2nd years of education.

**Microsoft Academy for College Hires (MACH)**, Weybridge, UK; Atlanta, GA; Seattle, WA; Johannesburg, RSA (2007-2008)

**Completed** MCPD exam 70-536 (**Application Development Foundation with Microsoft .NET Framework 2.0**)

**Studied C# and .NET Framework fundamentals**, Microsoft Project Management, Intercultural Negotiations, Sales and Marketing basics.

## SOFTWARE ENGINEERING KEYWORDS

**Programming Languages:** C# (5+3=work+hobby), Visual Basic 6.0 (2 years of hobby work), C++ (fundamentals - 1 academic year)

**Frameworks:** Microsoft .NET Framework (1.0-4.5.1), WPF (3+3=work+hobby)

**Data layers & platforms:** ADO.NET Entity Framework, LINQ to SQL, SQL Server (2005-2012), SQL Server CE, WinFS, SQLite, Azure Tables, Azure SQL Server

## OTHER RELEVANT INFORMATION

3 years open B1/B2 US visa.

Russian citizen.

Fluent in English and Russian. **TOEFL: 105 (of 120)**