# **Konstantin Gredeskoul**

Independent Software Consultant, CTO, VP Engineering

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# Summary

Welcome! Let me tell you a few things about me, since that's why you are here. I consider myself an almost obsessive "creator of things" as opposed to a "consumer of things". Perhaps a good way to think of me is as a combination of situationally aware, optimistic and positive, supportive leader, manager, engineer, problem solver, mentor, inventor, product designer, as well as a musician and a D.J. I am quick and resourceful, which makes me an effective problem solver. But I also know when to slow down, listen, discuss, and work with people through tough issues, be that technical, professional, emotional, or personal. I love challenging problems, and I am good at solving them because I enjoy the process tremendously. During the last three and a half years, I worked as a CTO at Wanelo.com. There, I had the honor of forming and then leading an engineering "dream team", that shared the values of being positive, personal mastery, collaboration, doing what you love while being nice to yourself and others. The culture I helped create and its people have ultimately empowered the team to enjoy phenomenally high productivity, low defect rate, and a happy, autonomous and empowered team, that's running a tight ship with high velocity, confidence, and accuracy, not to mention 99.99% uptime.

# Experience

### **Independent Consultant at ReinventONE**

November 2015 - Present (2 months)

I am currently available for part-time engagements, performing wide variety of responsibilities based on what is most pressing. Full-stack Senior Engineer Roles: # Very Senior Software Engineer and mentor, ruby, Rails, pair-programming, remote or local. # Software Engineer for hardware startups # C/C+ + for Arduino, Photon, Teensy, Imp, IoT devices, robotics. # Early startup "Swiss Army Knife" CTO/ Engineer CTO/VP Engineering Level Roles: # Temporary/substitute CTO, VP or Director of Engineering or VP of Operations # Feedback into an early product roadmap and software design & product inception # Engineering team culture development and adoption # Highly optimized engineering process for rapid development # Choosing technology vendors & contract negotiation # Best practices for building reliable software, that's easy to change # Technical due diligence, code reviews, design reviews Software Architecture and Distributed Systems: # Solving issues with scalability, SQL and NoSQL databases # Introducing fault tolerance and high availability into the application # Systems monitoring and alerting for humans # Feature and project timeline estimation # Cloud deployment, automation and DevOps to minimize spending

#### CTO at Wanelo.com

### February 2012 - Present (3 years 11 months)

I joined Wanelo right after Deena's (CEO, and a Founder) initial seed round. Working at two jobs for a couple of weeks, I jumped into fixing site's continuous outages caused by its own popularity, and the unpreparedness of the first team of developers who worked on the first Wanelo "prototype". After applying sufficient amount of "duck tape" allowed the company a few months of breathing room, I focused on establishing high-performance engineering practices within the newly formed team. Closely following the Pivotal Process, my team agreed to try full-time pair-programming, in addition to more familiar practices of continuous integration, daily deployments, and TDD. In just under two months that followed, with the team of six, we replaced the old Java app – 90K lines of code, no tests – with a compact Rails app – 10K LOC including tests. We then brought live the new application, migrated data from MySQL to PostgreSQL, and swapped Cloud vendors all at the same time. With just one hour of planned maintenance. Full story: http://bit.ly/ONeXPb From the very beginning our cloud infrastructure is 100% automated with Chef (enterprise), and most of the software is covered by the automated tests. These two practices, introduced from the beginning enabled the company to avoid having to hire a dedicated Operations or QA teams. Cloud and CDN resources are now provisioned and configured by the developers, across a range of technologies and vendors. See the following presentation at RubyConf Australia 2015: http://www.slideshare.net/kigster/ dev-ops-without-the-ops Stack: Ruby, ¡Ruby, Rails, PostgreSQL, Redis, the proxy, Nginx, haproxy, ElasticSearch, Solr, Memcached, Chef, Capistrano, Joyent Cloud, SmartOS, dTrace, Objective-C, iOS, Android, scaling, automation. Press: http://www.businessinsider.com/wanelo-ceo-deena-varshavskayainterview-2015-3 http://www.nytimes.com/2013/08/17/technology/hanging-out-at-the-e-mall.html

### Principal & Acting Director of Engineering at ModCloth

August 2010 - February 2012 (1 year 7 months)

ModCloth.com is an online clothing, accessories, and decor retailer recently featured as #2 fastest growing American company in the Inc 500 magazine http://bit.ly/8ZGrur My role combined both technical leadership as well as management of a 20+ person development team. Additionally responsible for directing the company from monolithic application towards SOA, helping the team adopt Solr search engine, automate deployment, and many other higher level initiatives such as test driven development with continuous integration, paired programming, short and frequent release cycles, migration to the cloud, and zero downtime releases. Stack: RoR, MySQL, PostgreSQL, Capistrano, Redis, Memcached, RSpec, SmartOS/Solaris

### CTO, Founder at Drop In Media LLC

September 2008 - September 2010 (2 years 1 month)

Industry: SMS/MMS, billing, premium messaging, carrier relations, carrier application development. Inhouse developed enterprise platform supports high volume SMS/MMS messaging, plug-in architecture for business logic, as well as billing and routing functionality similar to that of an SMS aggregator. Bootstrapped company part time in 2004, later transitioned into a full-time CTO role. In charge of all internal IT, Operations, Development, QA, technical integrations, evaluations, support for business development and

marketing initiatives, as well as hiring and managing an internationally distributed team of developers for a company of about 10 people. Stack: Java 1.6, Hibernate, Spring, JUnit, Linux, PostgreSQL 8 and 9

#### CTO at Infectious.com, Inc

June 2007 - May 2009 (2 years)

Infectious is an art community plus an online store, with a crowd-sourced content model built around modern art printed on adhesive vinyl. All aspects of technology, from operations, IT, engineering and hiring.

Infectious.com Inc employed about 10 people. Stack: RoR, PostgreSQL, RSpec, Capistrano, Linux

### Principal Engineer, Web Development at Blurb, Inc

March 2006 - June 2007 (1 year 4 months)

Lead Blurb's web team (four-five people team) in launching one of the first e-commerce applications on Ruby on Rails in 2006, in under four months, including data migration from the prototype. Blurb.com received a Webby Award in 2007. Stack: RoR, PostgreSQL, Java 1.6, Hibernate, Spring

### Senior Software Developer at RedSeal Systems Inc

September 2005 - March 2006 (7 months)

Industry: network modelling and risk measurement, vulnerability software. Designed two-tier plug-in framework to support a variety of devices and communication protocols (SSH, FTP, SCP), as well as the threat reference library related features. Java, Hibernate, PostgreSQL, Spring Framework, RMI, Client/server, Swing, XML/XSD.

### Systems Architect at Topica, Inc

April 1998 - August 2005 (7 years 5 months)

Industry: email list management software, marking automation, ESP (email service provider). Large distributed application running across 50+nodes, on top of a sharded database architecture, with a well-design web GUI based on Apache/mod\_perl and perl5. Stack: Oracle 8i, BEA Tuxedo, Perl5, Perl/XS, C, Apache, mod\_perl, XML, Java, Hibernate, Verity, gcc, gdb, make, Linux.

### Software Engineer at National Rails Corp, Australia

April 1995 - June 1996 (1 year 3 months)

Engineer on a distributed network component of the larger control system software rewrite at the largest commercial rail company in Australia. Automatic scanners installed across the nation registered trains, cars and individual containers as they were passing, and reported in real time location of each component to the central system. Stack: BEA Tuxedo, C (daemons under AIX/UNIX), Oracle Pro\*C, SQL, Pipes.

### Consultant / Software Developer at Cybersource Pty Ltd (Australia)

November 1994 - November 1995 (1 year 1 month)

Participated in several application development projects for Cybersource clients such as Gas and Fuel Corporation and Mental Health Research Institute. Work was mostly done in Visual Basic 3.0, which was used to develop a GUI front-end to Microsoft Access databases directly and via ODBC. Subsequently worked

on behalf of Cybersource for various clients on long term projects, including National Rail Austalia, National Mutual (AXA) Australia, etc.

# **Projects**

# **Ruby Gem: Ventable**

March 2013 to Present

Members: Konstantin Gredeskoul, Paul Henry

Simple eventing gem that implements Observable pattern, but with more options, ability to group observers and wrap them in arbitrary blocks of code. For example, when a certain event fires, some observers may be called within a transaction context, while others maybe called outside of the transaction context.

### **Ruby Gem: Compositor**

May 2013 to Present

Members: Konstantin Gredeskoul

A Composite Design Pattern with a neat DSL for constructing trees of objects in order to render them as a Hash, and subsequently JSON. Used by Wanelo to generate all JSON API responses by compositing multiple objects together in API responses, converting to a plain ruby Hash (or an Array) and then using OJ gem to convert Hash to JSON.

# **Ruby Gem: LaserCutter** September 2014 to Present

Members: Konstantin Gredeskoul

http://makeabox.io is a website front-end to a ruby-gem laser-cutter, which generates PDF files with designs for notched boxes, meant to be "printed" on the laser-cutter to create beautiful boxes and enclosures. See this blog post for the details: http://kiguino.github.io/2014/11/21/announcing-laser-cutter-makeabox-dot-io.html

### Certifications

### dTrace: Core Features & Performance Analysis

Joyent March 2013

### iPhone Development Bootcamp (Intermediate)

iPhone Development Bootcamp February 2012

# Volunteer Experience

#### Tutor at RailsBridge (Women in Technology)

January 2012 - Present (4 years)

Participated in several RailsBridge events assisting women learning Rails of various degree of prior engineering experience.

#### Mentor, Judge at IncubaUC

September 2015 - Present (4 months)

I was a mentor at a five-day long GeekCamp in Santiago, Chile. Help to filter down from 43 entrants tp 15 winning startups that will get grants and opportunity to come to the US. Geek Camp is a twice yearly, three months long startup acceleration program that give student and professional founders the opportunity to be mentored by leading innovators from around the world to bring ideas from prototype to startup. Geek Camp starts with a 5 day selection hackathon on the campus of the top university in Chile and results in the selection of a small handful of companies which receive \$20,000 in funding and an invitation to join an intense, 3 month long program focused on product design and development, user traction, business models and investor presentations. The final month of Geek Camp culminates in a one-month incubation in the Silicon Valley where founders connect with local investors, entrepreneurs, and advisors. Several Geek Camp alumni have gone on to raise seed rounds from investors, been accepted to top US accelerators and have also established US-based companies. Now in it's eight's cohort, Geek Camp 8 attracted over 1000 entrants from all over Latin America from which up to 15 will be selected to spend one month in the Silicon Valley in March 2015. Geek Camp is sponsored by Incuba UC the technology incubator at Universidad Católica de Chile (Chile's top university) and Austral Capital.

Languages

Russian (Native or bilingual proficiency)

English (Native or bilingual proficiency)

**Publications** 

### **Tuning TUXEDO Kernel IPC Parameters**

BEA February 1, 2001

Authors: Konstantin Gredeskoul

Tuning UNIX kernel parameters for fastest IPC communications on BEA Tuxedo version 5.

### Hadoop, There It Isn't—A Startup Bucks The Big Data Consensus

ReadWrite February 3, 2014

Authors: Konstantin Gredeskoul, Alex Salkever

Courses

### **Independent Consultant**

ReinventONE

Circuits and Electronics (via edX, MIT 6.002X) MIT 6.002X

Skills & Expertise

Ruby Ruby on Rails REST **Agile Methodologies** 

**MySQL** 

**PostgreSQL** 

**Software Development** 

**Scalability** 

**Test Driven Development** 

**Performance Tuning** 

Java

Linux

**jQuery** 

**Web Development** 

**Design Patterns** 

E-commerce

**Software Engineering** 

**SOA** 

**Continuous Integration** 

**Java Enterprise Edition** 

Git

Perl

**Redis** 

**Enterprise Architecture** 

Architecture

**XML** 

Hibernate

Solr

**APIs** 

**Spring** 

**Objective-C** 

**Mentoring** 

**DevOps** 

Android

**Spring Framework** 

**Message Queue** 

**Architectures** 

**Arduino** 

**Cloud Computing** 

**Start-ups** 

**JavaScript** 

**Enterprise Software** 

**Software Design** 

**Mobile Applications** 

**Databases** 

**SQL** 

**Web Applications** 

**Integration** 

# Education

# **Monash University**

BSc (Hons), Pure Mathematics, Statistics, 1992 - 1995

### Harkivs'kij Deržavnij Universitet im. I.P. Kotljarevskogo

BSc, Mathematics (transferred after 1 year), 1991 - 1992

# Honors and Awards

Publications: "Tuning UNIX kernel parameters for TUXEDO IPCs". TUXEDO Notes, Hegetor, UK, 2002. "Best Community Web Site 1997 Australia" - Telstra Internet award for the web site dedicated to the russian speaking community of Melbourne (ruscom.org.au)

### Interests

software, frameworks, electronic music, composition, production, mastering, digital audio, vocals, white water kayaking, travel, hiking, skiing, burning man, sushi

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# 17 people have recommended Konstantin

"As a CTO Konstantin puts great focus in developing a healthy engineering culture that extends outside his organization. He is able to build and lead extremely efficient teams by focusing on team success and empowerment. Konstantin, not only has formidable CTO skills, but is also a superb engineer. He is constantly refining his preferred stack to increase productivity and scalability. He is one of the brightest people I have ever met. He is a swift thinker and is able to come up to speed and give invaluable feedback. He uses all those skills to lead his team into success. I have enjoyed working with him so much that I worked with him at two different companies."

### — **Richard Millan**, Sr. Software Engineer, Wanelo, reported to Konstantin at Wanelo.com

"I have worked with Konstantin and can say he is bar-none the most technically minded CTO and leader I have worker with. He has an amazing depth in system turning, scaling architectures and ruby programming and database tuning. His biggest contribution though was building a super well oiled engineering team that is the dictionary definition of efficient, lean and driving a fully automated deployment infrastructure and enforcing best practices such as TDD in a pairing environment. Overall Konstantin is a super passionate and creating technologist and leader and would be a great asset to any team that wants to build an amazing tech org. I would fully work with him again in a heart beat."

### — Matthew Camuto, Sr. Software Engineer, Wanelo, reported to Konstantin at Wanelo.com

"Over and over, I've seen Konstantin focus not only on technical architecture & excellence, but on growing the people on his team. He continually works to hone his team's best practices, with the goal of making his team & company an incredible place to work. Whether it's carefully preparing to deliver actionable feedback, or charting next steps on career paths, or matching passions & skills with projects, Konstantin is relentlessly striving to help his team grow, and his company thrive."

# — Marcy Swenson, Executive Coach, StartupHappiness.com, was a consultant or contractor to Konstantin at Wanelo.com

"Konstantin's exceptionally sharp, innovative and a great technical mentor. As a manager he fosters employee growth by empowering them to take ownership. Most importantly, he knows how to build fun and efficient teams with a collaborative, can-do culture."

### — **Rob Harrison**, Senior Data Scientist, Wanelo, reported to Konstantin at Wanelo.com

"Not only is Konstantin a Ruby Expert - that goes without saying - he is a great team leader. He takes the right risks, is willing to listen to other's point of view, and encourages advancement and progress of the individuals on his team. He really stays on top of where the Rails Community is going as well - and is a goto guy if you need a suggestion on which tools are the right ones to use. Because of this (in fact, because of all that I mentioned above), we saw tremendous speed and performance improvements in our production environment and a clear path to a better development environment as well. It was an absolute pleasure working with him and I hope our paths cross again in the future."

### — Adam Medeiros, reported to Konstantin at ModCloth

"Through my experience as a developer, I've seen several developers excel at what they are commonly asked for: deliver code. But Konstantin is a case where I did not only realize the tech guru he is, but I also acknowledged his leadership and great sense of project accomplishment. He is one of the few people I think, a company is not only lucky to have him, but he is necessary if they want to have a leader which will improve the tech unit's performance as a group. Personally, I really enjoyed having Konstantin as a leader, after all, who doesn't like to have such a person in a daily work basis to emulate?"

### — Ignacio De La Madrid, worked indirectly for Konstantin at ModCloth

"Codes faster than lightning. I feel extremely lucky to work with Konstantin at Drop in Media. His skill with software architecture, development and team leadership is invaluable. He has a keen mind and a sharp intellect which he proves time and again while tackling difficult problems. His most valuable asset is his motivation and drive which is an inspiration and ensures the job gets finished."

### — **Tony Rose**, worked directly with Konstantin at Drop In Media LLC

"It goes without saying that Konstantin is a talented engineer with deep expertise in a broad range of technologies. He built the foundation of Infectious and did everything technical we needed. He was a swiss army knife CTO who was hands on and great at getting stuff done. But he is more than a great technologist. He has incredibly good product sensibility, an eye for well designed UI and passion for creating quality. He contributed heavily to strategy with a very pragmatic approach, balancing business needs and technical vision. Konstantin is a solid leader and I look forward to working with him again in the future."

### — **Tim Roberts**, managed Konstantin at Infectious.com, Inc

"Konstantin is one of those people with a great ability to get things done. He is able to balance business needs and technical scale in a way that makes him a great team member at a startup. He was instrumental in getting Blurb's initial e-commerce store in Ruby On Rails off the ground, designing key components of the back and front end, as well as putting in place systems and agile processes for deployment to production."

### — Greg Dotson, managed Konstantin at Blurb, Inc

"Konstantin is an extremely smart, intelligent and decent fellow. Konstantin worked at Redseal during a formative period where the product evolved from prototype status towards being a full enterprise product, and as such he had to design and build large chunks of the system. He attacked this with his usual enthusiasm and vigor. Konstantin is an excellent and fun person to work with and I wouldn't hesitate to work with him again!"

### — Fiid Williams, worked directly with Konstantin at RedSeal Systems Inc

"There are those people who you work with that will forever be a positive influence on your professional life. Konstantin is one of those people. Not only is he the must have person you want on your team when tackling the Big Problem, but he makes it seem easy and does it with grace. His skill in technology is only matched by his skill as a musician. A leader for the digital renaissance age."

### — Matt Levy, worked indirectly for Konstantin at Topica, Inc

"Konstantin is a top-notch technical leader. He is as smart as they come, and is exactly the type of go-to, getit-done guy you want on your team. He is much more than an engineer - he can help work through tough technical and business problems, and brings tons of creativity to every situation. I'd jump on the opportunity to work with him again!"

### — John Berkley, worked with Konstantin at Topica, Inc

"Konstantin is a brilliant systems architect. He always found the fastest and most elegant approach to solve our technical challenges. He was a pilar at Topica and fundamental to many of our achievements. I hope I get to work with Konstantin again in the future..."

### — Ariel Poler, managed Konstantin indirectly at Topica, Inc

"Konstantin was definitely the go-to person at Topica. The success of Topica's application is mainly due to his design and coding efforts. He would take on the most challenging projects and delivery them on time and of exceptionally high quality. I can not speak any higher of Konstantin's technical abilities."

### — Li Sen, managed Konstantin at Topica, Inc

"Konstantin's basic architecture decisions have served Topica's expanding needs for 5 years. He is brilliant and opinionated, and I have learned a lot by working with him."

### — J. David Lowe, worked directly with Konstantin at Topica, Inc

"Konstantin was a very key person on the project. He provided expertise across a range of technologies and was instrumental in getting the project across the line."

### — Alex Atran, worked directly with Konstantin at National Rails Corp, Australia

"In the mid-90s, the Web became the preferred method of building and deploying business applications. Konstantin was the first among our staff to recognise this. His vision, coupled with his immense technical talent, allowed us to leapfrog many competitors into this space. I would commend Konstantin for any project, no matter how challenging."

— Con Zymaris, managed Konstantin at Cybersource Pty Ltd (Australia)

Contact Konstantin on LinkedIn