Resume

Solution/Application Architect, Tech Lead, XP coach, Python/FullStack Software Engineer

Contacts:

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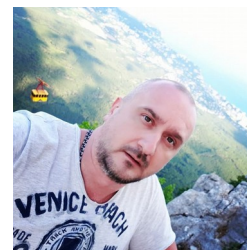Skype: industrialnet
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Open Source (primary): https://bitbucket.org/emacsway
Open Source (secondary): https://github.com/emacsway

About me:

Total of 15+ years of software development experience in delivering large-scale, high quality, performance-critical software and project management from software specification inception until product deployment and live launch.

Deep knowledge of modern architecture approaches: DDD, EDA, CQRS/ES, Microservices, Clean Architecture etc. Agile practices: CI/CD, TDD, Evolutionary Design, Collaborative Development, XP, Scrum etc. Software design: SOLID, LC&HC, GRASP, SRP, OCP, LSP, ISP, DIP, REP, CCP, CRP, IDP, SDP, SAP, KISS, DRY, YAGNI, UML, GoF, PoEAA, Cloud Design Patterns, Enterprise Integration Patterns, Service Design Patterns, Conway's law, etc.

Deep theoretical and wide practical background. Extensive bibliography (see Appendix A at the end of the file).

Successful experience of dealing with extremely complicated Domain/Application Logic, high performance, practical applying theory of algorithms, splitting monolith, working effectively with legacy code. Multiple improvement in development economics and team velocity. Nice team microclimate.

Participated in the development of software for various business domains using wide technology stack: Python, JavaScript/Typescript, Golang, PHP, Django, Angular, ZF, with main focus on Python.

Strong leadership and management skills. Innovative, hands-on executive with record of leading design and development of high technology products, improving processes and procedures to drive revenue, efficiency, and market share. Successful leadership of teams of up to 15 members in IT-industry and up to 33 members in total.

The real establishing of economically successful Agile development which really works and allows customers to quickly change implemented decisions depending on feedback from previous iterations. The development without overtime; with met deadlines; with predictable estimations; with nice team microclimate; with high team velocity; with high quality, flexible, reliable codebase; with satisfied customers and developers. If you are in software development for more than 4 years, then you know what I'm talking about.

My main interest is to make the code clean, simple and maintainable; the implementation of new features rapid and cheap; the curve of cost of code change asymptotic (instead of exponential); the risks low; the team successful.

Education:

1994-1999 - The Dnepropetrovsk State Technical University of Railway Transportation, master's degree
2018-present (up to 2020) - Private Institute of Higher Education "Zaporizhzhya Institute of Economics and Information Technologies", Software Engineering, master's degree

Open Source Projects:

Python:
  - rope (contributor) - a python refactoring library.
  - SQLBuilder (author) - a lightweight Python SQLBuilder. Can be integrated with Django.
  - cache-dependencies (author). Cache-dependencies (former Cache-tagging) allows you easily invalidate all cache records tagged with a given tag(s). The package supports Django.
  - Ascetic ORM (author) - a lightweight Python DataMapper ORM (the project is incomplete).

JavaScript:
  - Store.js (lead contributor) - a super lightweight implementation of Repository pattern for relational data and aggregates. The library allows you to use Domain-Driven Design (DDD) on client-side as well as reactive programming.

Articles:

Caution: these articles are outdated and do not reflect the current level of my knowledge.

Articles in English:
- "Implementation of Repository pattern for browser's JavaScript"
- "About my experience of using Django Framework"
- "Design of Service Layer"
- "About problems of cache invalidation. Cache tagging."
- "How to quickly develop high-quality code. Team work."
- "Why I prefer Storm ORM for Python"
... all articles in English>>

Articles in Russian:
- "Про Agile на пальцах. Путь к быстрой разработке."
- "Реализация паттерна Repository в браузерном JavaScript"
- "О моем опыте использования Django Framework"
- "Управление логикой приложения. Про MVC, Use Case, Service Layer, CQRS, Event Sourcing и др."
- "Проектирование Сервисного Слоя"
- "О проблемах инвалидации кэша. Тегирование кэша."
- "Почему я выбираю Storm ORM для Python"
... all articles in Russian>>

Experience:

Feb 2019 - present - Team Lead at a Fitness startup.
  • Introduced the best Agile development practices: CI/CD, TDD, Evolutionary Design, Collaborative Development, Code Review and Code Reading, Iterative planning with Agile tools, XP, Scrum etc.
  • Had created a turning point in the qualitative improvement of the development economy.
  • Multiple improvements of the reliability. Multiple reduction of the number of bugs.
  • Successful dealing with extremely complicated Domain/Application Logic.
  • Significant architectural improvements using DDD, EDA, CQRS/ES, Microservices, Clean Architecture.
  • Splitting the monolith.
  • Working effectively with legacy code
  • Practical applying theory of algorithms.
  • Drastic improvement in performance optimization.

- Participating in the team building. Interviewing of candidates.
- Performing responsibilities of Solution Architect.

Jul 2017 - Feb 2019 - Solution Architect and XP coach at Business Technologies www.biz-tek.ru. The the company founded the well-known projects ok.ru and sravni.ru. I was participated in development of the enterprise content management system for medical journalism.
- Introduced best practices of Software Design and Agile software development (TDD, XP, CI, CD, DDD, Microservices, Evolutionary Design etc.).
- Keeping the flattened change cost curve of the project. Clean architecture and rapid development. Quick MVP creation.
- The scope of MVP was increased in twice due to high team velocity.
- Almost no bugs due to TDD and Clean Code.
- Created proprietary library for Django model audit which implements Slowly Changing Dimensions (SCD) - Type 4 and supports versioned relationships.
- Applying "Monolith First" principle of Microservices building.
- Technology stack and approaches: Python, JavaScript, PostgreSQL, RESTful API, Django, Django-rest-framework, Angular5+, AWS, Heroku, Docker, Scrum, Jira etc.

Nov 2016 - Jul 2017 - Senior Full Stack Software Engineer (remote) at jooraccess.com, the global wholesale marketplace where the biggest brands and best retailers do business online.
- Introduced TDD (and some other practices of XP), DDD, Evolutionary Design, code review based on catalog of refactorings and catalogs of code smells, continuous review, monitoring with New Relic.
- Solved a lot of issues of architecture and design. Improved quality of the codebase. Reduced time of implementation of new features due to the introduced design approaches.
- Was performing some responsibilities of Solution Architect.
- Created the high-level library Store.js to handle data on client-side.
- Technology stack and approaches: Python, JavaScript, PHP, Bash, Django, PostgreSQL, jQuery, AngularJS, Dojo, RESTful API, CORS, JWT, Django-rest-framework, CakePHP, Redis, Celery, Pl/SQL, AWS, Ubuntu, Scrum, etc.

Feb 2013 - Jul 2016 - Senior Backend Developer (remote) at project rebelmouse.com, the best online CMS for social websites.
- Actively used Evolutionary Design, TDD, code review based on catalog of refactorings and catalogs of code smells.
- Debugging on production. Low-level debugging with GDB.
- Backend/SQL high performance optimization. Monitoring with New Relic.
- Implemented social networks integration, polymorphic relations, ACL, statistics, data analytics.
- Technology stack and approaches: Python, Bash, Django, MySQL, MongoDB, RESTful API, Redis, Celery, Memcached, Eventlet, Ubuntu, replication, clustering, document-oriented data storage, Kanban, etc.

Aug 2011 - Mar 2013 - Senior Full Stack Software Engineer (remote) at tripster.ru, a Russian travel portal and FAQ for independent travelers. Technology stack and approaches: Python, JavaScript, Bash, Django, GIS, jQuery, MySQL, RESTful API, Solr, Nginx, Memcached, Debian, sub-processing, threading, Queue, Async, 3-d SQL Builders, morphology, fast compiled template engine wheezy.template, automatic text processing, etc. Implemented a lot of basic features, social networks integration, integration with geonames services, integration with partner's API, advanced ACL, flexible user notification, variouse Ajax UI widgets, cache dependencies, phased cache, cache cleaning synchronization with DB transactions. Backend/SQL high performance optimization.

Jul 2010 - Jun 2011 - Team Lead at Soft-Ukraine. Developed an intracorporate portals. Technology stack and approaches: Python, JavaScript, Bash, Django, Dojo, jQuery, PostgreSQL, RESTful API, MVVM, dojox.data.JsonRestStore, Ajax UI, Ruby On Rails, Pinax, Debian, Multilingual, etc. DevOps.

Oct 2009 - Jul 2010 - Co-founder and CTO at Dstudio. Organized mass production of business card site using Drupal. Developed a city portal using Django and Pinax. Organized infrastructure and team training. DevOps. Technology stack and approaches: Python, JavaScript, PHP, Bash, Drupal, Django, Pinax, Redmine, Trac, Debian, etc.

Jan 2004 - Oct 2009 - Zakrevskyi Entrepreneur. Web-development using PHP, Python, JavaScript. Development and maintenance of an industrial business portal. Technology stack and approaches: Python, JavaScript, PHP, Bash, Django, PostgreSQL, MySQL, Dojo, jQuery, Zend Framework, Pinax, Debian, etc.

Afterword:
"The value of good software design is economic: you can continue to add new functionality quickly even as the code-base grows in size." ("Design Stamina Hypothesis" by Martin Fowler)

Appendix A: Bibliography
The list of software literature read by me:

Architecture & Design:
    "Design Patterns: Elements of Reusable Object-Oriented Software" by Erich Gamma, Richard Helm, Ralph Johnson, John Vlissides
    "Patterns of Enterprise Application Architecture" by Martin Fowler, David Rice, Matthew Foemmel, Edward Hieatt, Robert Mee, Randy Stafford
    "Refactoring: Improving the Design of Existing Code" 1st edition by Martin Fowler, Kent Beck, John Brant, William Opdyke, Don Roberts
    "Clean Code: A Handbook of Agile Software Craftsmanship" by Robert C. Martin
    "Code Complete" 2nd edition by Steve McConnell
    "Clean Architecture: A Craftsman's Guide to Software Structure and Design" by Robert C. Martin
    "Domain-Driven Design" by Eric Evans
    "Test-Driven Development By Example" by Kent Beck
    "Building Microservices. Designing Fine-Grained Systems" by Sam Newman
    ".NET Microservices: Architecture for Containerized .NET Applications" edition v2.2.1 by Cesar de la Torre, Bill Wagner, Mike Rousos
    "Pattern Hatching: Design Patterns Applied" by John Vlissides

Programming languages:
    "Learning Python" 4th edition by Mark Lutz
    "Python Tutorial" and "Python HOWTOs" (official)
    "JavaScript: The Definitive Guide" 6th edition by David Flanagan
    "JavaScript Patterns" by Stoyan Stefanov
    "ng-book2. The Complete Book on Angular 6" by Nate Murray, Felipe Coury, Ari Lerner, and Carlos Taborda

Databases:
    "PostgreSQL" 2nd edition by Korry Douglas, Susan Douglas
    "NoSQL Distilled. A Brief Guide to the Emerging World of Polyglot Persistence." by Pramod J. Sadalage, Martin Fowler

Algorithms:
    "Algorithms Unlocked" 3d edition by Thomas H. Cormen

"Algorithms and Data Structures" (Oberon version: August 2004) by N.Wirth

Compilers & Parsers:
"Compiler Construction" by N.Wirth

Methodologies:
"Extreme Programming Explained" 1st edition by Kent Beck
"Extreme Programming Explained" 2nd edition by Kent Beck
"Planning Extreme Programming" by Kent Beck, Martin Fowler
"The Clean Coder" by Robert C. Martin
"Scrum and XP from the Trenches: How We Do Scrum" 2nd edition by Henrik Kniberg
"The Mythical Man-Month Essays on Software Engineering Anniversary Edition" by Frederick P. Brooks, Jr.

Operational system:
"Unix and Linux System Administration Handbook" 4th edition by Evi Nemeth, Garth Snyder, Trent R. Hein, Ben Whaley
"The Linux® Kernel Primer: A Top-Down Approach for x86 and PowerPC Architectures" by Claudia Salzberg Rodriguez, Gordon Fischer, Steven Smolski
"Digital computers and microprocessors" by Aliyev / "Цифровая вычислительная техника и микропроцессоры" М.М.Алиев

English:
"Friendly meetings with the English language" 3d edition by Maria A. Kolpakchi
"English. Reference materials." by Ksenia A. Guzeeva, Tamara G. Troshko