Victor Danilchenko

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OBJECTIVE: Senior technical position where my diverse background and experience will allow me to make the world a better place and engage in creative technical pursuits while delivering value to the enterprise.

PRECIS

I am a "full-stack" solution and enterprise architect with a wide array of both theoretical and practical knowledge. I am extremely self-motivated, capable of carrying a task from conception and specification through architecture, implementation, and operationalization. I have experience leading technical development of complex IT, IoT, and enterprise projects.

Possessing proficiency with a broad array of environments and technologies, as well as experience with technical architecture and architectural processes, I can leverage my excellent problem-solving and communication skills towards addressing a wide variety of problems, and readily translate between technical requirements, business & enterprise strategy, and non-technical user needs.

As a part of my work and a matter of personal interest, I also participate in, and lead, various research, invention, and international standardization activities.

SYSTEMS & PLATFORMS

Operating systems: UNIX, Windows, Mac OS/X Cloud computing platforms: Azure, AWS

SOFTWARE TECHNOLOGIES

Software Stacks and Frameworks: .NET, Ajax, Rack, Django, LAMP, Mason

Programming languages: JavaScript, C#, Ruby, Perl, PHP, C++, Objective-C, Lisp, ML,

Database technologies: SQL, NoSQL

Software and development paradigms: IoT, IIoT, Agile, DevOps, REST, multi-tier architecture, microservice architecture

PUBLICATIONS

- V. Danilchenko, M. Theobald, D. Cohen, "Bootstrapping security configuration for IoT devices on networks with TLS inspection", IEEE GlobeCom 2019 workshops.
- C. El Kaed, V. Danilchenko, F. Delpech, J. Brodeur, "Linking an Asset and a Domain Specific Ontology for a Simple Asset TimeSeries Application", IEEE Big Data 2018 workshops.
- A. Mouaddib, S. Zilberstein, V. Danilchenko, "New Directions in Modeling and Control of Progressive Processing", ECAI 1998.
- S. Zilberstein, E. Hansen, V. Danilchenko, "Anytime Heuristic Search: First Results", Journal of Artificial Intelligence Research 1998.

PATENTS

- V. Danilchenko, D. Cohen, "IoT Licensing platform & architecture", US Patent Application 17/385,595, filed July 2021. Patent pending.
- V. Danilchenko, J. Brodeur, "Relationship-based Access Control for IoT Networks", US Patent Application PCT/US21/40402, filed July 2020. Patent pending.
- V. Danilchenko, J. Brodeur, "Secure data orchestrator for IoT networks", US Patent Application PCT/US20/59890, filed October 2020. Patent pending.

- V. Danilchenko, D. Cohen, "Establishing and maintaining secure device communication", US Patent Application PCT/US20/33727, filed May 2020. Patent pending.
- V. Danilchenko, D. Cohen, "Security Context Distribution Service", US Patent Application 17/292,604, filed January 2020. Patent pending.
- V. Danilchenko et al., "Systems and methods for dynamic ontology data operation", US Patent Application 17/283,069, filed April 2020. Patent pending.
- V. Danilchenko, T. Whitehill, "Distributed standards registry for cloud computing environments", US Patent Application 16/972,573, filed December 2020. Patent pending.
- V. Danilchenko, T. Whitehill, C. EL Kaed, "Semantic meta federation broker for cloud environments", US Patent Application 17/045,423, filed October 2020. Patent pending.
- V. Danilchenko, T. Whitehill, "Systems and methods of a progressive cloud based architecture", US Patent Application 17/040,285, filed September 2020. Patent pending.

PROFESSIONAL CERTIFICATIONS

TOGAF 9 Certified

MCSE Cloud Platform & Infrastructure

STANDARDS BODIES PARTICIPATION

IEEE P2301 working group: Cloud Profiles

IEEE P2302 working group: Intercloud Interoperability and Federation

ISO/IEC JTC1 sub-committee 38: Cloud Computing and Distributed Platforms

EMPLOYMENT

- 2016-Present **Senior Principal IoT Solution Architect**, Schneider Electric Inc., Digital Services Factory group, IoT Digital Transformation initiative
 - Developed capability-centric IoT reference architecture
 - Engaged with other Business Units to guide digitalization of existing products and services
 - Initiated engagement process revision and update to better align it with the Enterprise Architecture paradigm
 - Designed and then taught a series of training courses ("EcoStructure Technology Platform Bootcamp") to corporate locations around the globe
 - Provided cloud (esp. Azure), IoT, and IIoT architectural expertise on multiple internal and customer-facing projects, including Industry 4.0 projects
 - Guided the architecture cycle during multiple project engagements, and helped develop their architectural vision, content, and roadmap
 - Worked with customers to identify, capture, and formalize business requirements
 - Initiated, incubated, and architected new platform services and capabilities (LPWAN integration, Ontology platform, etc.)
 - Initiated and/or drove multiple internal projects (Enterprise Architecture, documentation framework, architect working group, reference architecture, etc.)
 - Generated Intellectual Property in the form of patents
 - Authored and co-authored several published research articles
- 2012-2016 Solution Architect, Cimpress Inc., Learning & Knowledge Management group
 - Oversaw a best-in-class knowledge base on MediaWiki platform, with over 200,000 articles (LAMP stack with PHP, on vSphere private cloud)
 - Designed and led the implementation of high-availability clustering solution for the company-wide MediaWiki installation (load-balanced front end, MySQL cluster backend)
 - Initiated and led through completion the migration of the LKM group's systems to a DevOps platform (Puppet), creating modular design with over 40 distinct system types
 - Designed the LKM group's data access architecture (PHP+JS front end, Windows DFS

- backend, over 6 million documents)
- Initiated and led through completion the implementation of the group REST microservice platform (primarily JS, Bootstrap, Ruby, Sinatra, PHP, Apache)
- Mentored junior developers in proper software engineering and architecture processes and methodologies

2007-2012 Chief Technical Officer, AskOnline Inc.

- Led development effort for Software-as-a-Service solution that scaled to over 300,000 users with a highly efficient infrastructure backend
- Was lead evaluator of third party systems, integrated several into the SaaS platform
- Oversaw platform integration with the clients' IT infrastructure (ADS, LDAP, SSO, etc.)
- Deployed the sales support infrastructure, oversaw its integration with third-party analytics services
- Managed customer support for hundreds of clients, achieving 99.99% uptime
- Performed product evangelism and outreach, attending multiple conferences

2005-2007 **Senior Software Engineer**, AskOnline Inc.

- Developed the SaaS application in the LAMP framework
- Was lead evaluator of third party systems, integrated several into the SaaS platform
- Integrated with the clients' IT infrastructure (ADS, LDAP, SSO, etc.)
- Administered the server backend for the SaaS deployment

1997-2005 **Software Specialist**, University of Massachusetts/Amherst

- Performed system administration for over 1800 Windows, Unix, and Mac clients and servers
- Performed end-user technical and operations support for a 400-member department, 45 research labs and administrative groups
- Primary in-house software developer for the department support group (5 applications)
- Implemented and supported various client/server technologies, such as LDAP, NIS, SQL, mail, web, and the SSL infrastructure

1996-1998 Research Assistant, RBR lab, Umass/Amherst

- Performed AI research at Resource-Bounded Reasoning Laboratory, coauthored and contributed to several publications
- Researched the theoretical aspects of 'anytime' algorithms

EDUCATION

2002 MS in Computer Science (Al concentration), University of Massachusetts

1996 BS in Computer Science, PACE University (Summa Cum Laude)

LANGUAGES

English, Ukrainian, Russian (fluent), Spanish, French (intermediate)

REFERENCES

Available upon request