

Antonín Král

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Overview

A well educated, Technical Director with experience from technology startups and broad outlook of areas of the Software Development, IPTV and Computer Networks and ambitions to explore developments and advances in this or related areas.

Education

- 03/2004 – 06/2009 **Ph.D., Czech Technical University in Prague**
Department of Mathematics, Faculty of Nuclear Sciences and Physical Engineering
Thesis topic: "Large-Scale Distributed System for Multimedia Retrieval".
- 09/1997 – 06/2003 **Master of Science (Ing.), Computer Science, Czech Technical University in Prague**
Department of Computer Science, Faculty of Electrical Engineering
Thesis topic: "Scheduling Strategies in Routers".

Work Experience

- since 12/2007 **Alnair a.s. – nanguTV Platform, CEO**
Defined a company vision and strategy. Designed a distributed, high-scalable and fault tolerant platform for IPTV and VoD Services delivery. Led preparations of customized solutions. Supervised and defined the corporate processes. Defined corporation business strategies. Led development and implementation team. nangu.TV platform is based on work of ITonis Inc.
<http://nangu.tv>
- 12/2004 – 01/2009 **ITonis Inc., Technical Director and CTO**
Designed platform now aquired by Alnair and shipped as nangu.TV. Led installations in the customers premises. Led and supervised technical aspects of negotiations of cooperation in China.
<http://www.itonis.tv>
- 06/2000 – 01/2005 **T-Systems PragoNET, Designer** in department of the Network Development.
Designed IPv4 and IPv6 layer of the PragoNET's backbone. Led roll out of IPv6 and MPLS services into the backbone. Supervised AS peering and key application servers (name server, network management system servers, etc.). Designed and supervised realization of key customers' projects (e.g. National Trade Licences Registry, DHL Computing Center, Decentralized system for TLD .cz). Led integration with Deutsche Telecom TGN.
<http://www.t-systems.cz>

Academia/University Related Experience

- 03/2004 – 09/2011 **CERN** (European Organization for Nuclear Research), Switzerland, *Researcher.*
Participated in the experiment COMPASS namely at Central Data Recording (CDR) – the crucial part of the data processing pipeline based on distributed multi-petabyte storage. Designed and implemented a new job submission system for the hadron data production. Committed several improvements to the on-line monitoring system (COOL).
<http://www.cern.ch>, <http://wwwcompass.cern.ch>
- 05/2005 – 12/2011 **Brookhaven National Laboratory, USA and RIKEN, Japan, Researcher.**
Participated in the Joined Czech Group at BNL. Contributed to the PHENIX experiment by troubleshooting and tuning of the computational cluster management system (based on Condor) and vxWorks-based event catchers. Proposed optimizations of data processing and management in RIKEN.
<http://www.bnl.gov>, <http://www.riken.go.jp>
- since 10/2002 **Czech Technical University, Teacher.**
Giving lectures at the Department of Software Engineering, Faculty of Nuclear Sciences and Physical Engineering and Department of Computer Science of Faculty of Electrical Engineering. Covered topics: Computer networks, IP protocols, Textual Information Systems, Information Retrieval.
<http://ip.bobek.cz>
- 01/2003 – 10/2005 **CESNET** (Czech National Research and Education Network), *Researcher.*
CESNET is a member of European research network – Geant, which is similar to the Internet2. *Researcher at the end-to-end performance and QoS group. Designed a distributed network performance measurement system. Participated in international projects LOBSTER and European research*

activity JRA1.

<http://www.cesnet.cz>

- 07/2000 – 01/2005 **Czech Technical University in Prague**, Department of Computer Science, Faculty of Electrical Engineering and Computing and Information Centre of CTU.
Designed and built two independent clusters (AMD Athlon and Intel PIII) for high-performance computing (especially material simulations) and education. *Proposed and supervised* deployment of IPv6 at CTU.
- 05/2002 – 11/2004 **Student Union** of the Czech Technical University Prague, *Technical Director*.
Oversaw the global technical (especially networking) strategy of SU. *Led* negotiations with University bodies (e.g. rector, director of computing center).
<http://www.su.cvut.cz.cz>
- 09/2000 – 04/2003 **IEEE Student Branch Chairman**
- 11/1997 – 01/2003 **Silicon Hill**, *Chairman*.
Led the largest campus network build by students in Europe. *Defined* processes and formal regulations governing the SH.
<http://www.sh.cvut.cz.cz>
- 2000 – 2002 **OpenWeekend** conference, *Founder and Chairman*
<http://www.openweekend.cz>

Other Relevant Experience

- since 10/2004 **Trusted Solutions s.r.o.**, *Founder*
Consultancy in topics related to computer science, IT with emphasis on computer networks, scalable systems, storages, software engineering and strategy.
<http://www.trusted.cz>
- since 04/2001 **Debian GNU/Linux**, *Developer*.
Taking care about several packages (e.g. pimd, ARANyM, MongoDB).
- 10/2004 – 05/2007 **Ministry of Informatics Czech Republic**, *Member of board of experts*.
Appointed as member of a board of experts KIVS infrastructure (Communication Infrastructure for Public Administration). *Appointed* as member of a board of experts for European Government Communication Infrastructure – IDAbc.

Personal Skills

- Management Experience with company and team leadership. Strong addiction for finding right solutions, architectures and design. Open-minded, strategic thinker.
- Software Eng. Experience with several software engineering methodologies, especially XP-like. Management of necessary processes – version control, issue management, release and quality management, etc.
- Networking Content Switches, Routers, Ethernet Switches (mostly from Cisco Systems Inc.). Deep understanding of IPv4 and IPv6 protocols. Complex knowleade in IP routing (BGP, OSPF, IS-IS, etc.), IP addressing, IPv6, VPN, IP security, IP Multicast, IP Multimedia and VoIP (e.g. RTP, RSVP), QoS (DiffServ, IntServ, algorithms, ...) as well as user-land protocols (such as http, SMTP, SNMP, IMAP, POP3, FTP, LDAP, DNS, AFS, NFS, Lustre, etc.).
- Operating Sysys. Linux (especially Debian based distros, written kernel modules), IOS (Cisco Systems Inc.). Orientation in FreeBSD, Solaris.
- Programming Perl, Ruby, Bash (used C, C++, Assembler, Erlang, Java, SmallTalk).
- Digital Media Deep understanding of technologies related to digital media, such as MPEG2 standards, H.264 (MPEG4 Part 10), mkv, etc.
- Language Skills *Czech* native, *English* advanced, *German* basic.

Recognitions

- 2002 Recognition for *Superior Contributions* to the Activities of the Czechoslovakia Section IEEE

Activities and Personal Interests

photography, swimming, climbing, hiking, classical music, books, playing guitar, outdoor activities