

PETER KORTVELYESI – DIRECTOR, TECHNOLOGY SOLUTIONS DATA ENGINEERING

SUMMARY

Architect and solution consultant for large scale data analytics, big data and cloud projects

Specialties

- Management consulting on data strategy, data governance, data quality
- Technical management of Big Data, data analytics and data governance projects
- Architecting cloud solutions
- Auditing IT projects - ensuring optimal use of technologies and cost-effective project lifecycle
- Hands on experience with Hadoop and NoSQL data solutions, AWS data products, DevOps in Linux environment
- Developing secure operation solutions, consulting on future-proof technologies
- Integration of software quality assurance solutions, quality gates to large enterprise processes
- Owner and author of hobby blog <https://datacloud.lionautomation.com>
- MSc in Technical Informatics, MSc in Economics
- Certified in IT auditing (CISA), requirements management (IREB), testing (ISTQB), IT service management (ITIL), Amazon Cloud (AWS) and Hadoop operation (HDCPA)

EDUCATION

Name of the Education Establishment: University of Szeged

Faculty/College: Natural Sciences And Informatics

Degree (diploma): Master

Specialty: Technical Informatics

Name of the Education Establishment: University of Szeged

Faculty/College: Economics And Business Administration

Degree (diploma): Specialist

Specialty: Engineer-Economist

CERTIFICATES

- 2019 - Amazon Web Services: AWS Certified Solutions Architect - Associate
- 2015 - Cloudera: HDP Certified Administrator
- 2014 - ISACA: Certified Information Systems Auditor® (CISA)
- 2013 - International Requirements Engineering Board: Certified Professional for Requirements Engineering Foundation Level
- 2012 - ISTQB: ISTQB® Certified Tester Foundation Level (CTFL)
- 2012 - AXELOS: ITIL® Foundation CPD

WORK EXPERIENCE

Apr-2015 - Till now (Dec-2022)

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Software & Hi-Tech

Project: Big Data Competency Center

Team Size: Competency center's team of solutions architects

Project Role: Solution Architect

Tasks performed:

- Architecture planning of high-performant Big Data analytics clusters
- Published a whitepaper: Data Governance in the Big Data and Hadoop world
- Coordinating knowledge development within the Big Data Competency Center
- Hosted various events on Big Data technologies and data governance

Environment: Big Data, NoSQL, Hadoop, Spark, Storm, Kafka, MarkLogic

Mar-2021 - Oct-2021

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Travel & Hospitality

Project: Data platform for Qatar Airways

Team Size: 5 Data Engineers, 1 BA, 1 DevOps, 1 SM

Project Role: Solution Architect

Tasks performed:

- Establishing Data I/O from on-premise databases to cloud with secure data flow
- Introducing Databricks platform to the organization
- Data wrangling with Databricks, presentation with Tableau and PowerBI

Environment: Azure Storage, MS Azure, Databricks, Databricks Spark

Apr-2020 - Feb-2021

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Software & Hi-Tech

Project: Healthcent AWS cloud transformation program

Team Size: Started as a data project discovery with myself as the data architect, it grew to a 50+ people data team

Project Role: Solution Architect

Tasks performed:

- Kick-off of program: business analysis of scope, understanding demand, setting up initial project structure, onboarding personnel
- Overlooking the architecture program of 4 streams, 6 architects; setting up proper governance
- Ensuring high quality technical delivery

Environment: Cloudera Hadoop, AWS EMR, On-premise Hadoop technology migrated to AWS cloud

Dec-2019 - Feb-2020

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Life Sciences & Healthcare

Project: Integration of CRM Data to a big data platform and render it in Tableau Dashboards

Team Size: Self

Project Role: Data Solution Architect

Tasks performed:

- Creating a new service offering for EPAM in data quality: a deck defining the domain, researching tools, creating an accelerator blueprint. Presenting the project proposal to the client
- Auditing Hadoop cluster security: presenting best practices and evaluating the implementation status for the customer's system. Defining next steps for corrective actions on security vulnerabilities

Environment: Data quality tools (Cucumber, Gherkin, Jenkins, TamR, Informatica)

Nov-2019 - Dec-2019

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: EV - Telecommunication

Project: Digital strategy for Xandr Media Publishing - personalized content delivery

Team Size: Discovery team of 10 - BAs, web, data and machine learning solution architects and CMS engineers

Project Role: Data & Cloud Solution Architect

Tasks performed:

- The portal provides personalized content based on historical views for 100m+ users
- Data architecture of geo-distributed log tracking system for machine learning with AWS services, including web service, database and content delivery layers
- Creating an AWS based machine learning architecture blueprint
- Elaborating on DevOps best practices

Environment: Evaluating AWS offerings (AWS Aurora, Redshift, ElasticSearch Service, DynamoDB), • High-performant, auto-scaling cloud services • Geo-distributed database systems

May-2019 - Sep-2019

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Life Sciences & Healthcare

Project: Master data management of doctors' data for the commercial group of the organization

Team Size: 20+ team members distributed in Russia and US

Project Role: Subproject lead, DevOps consultant

Tasks performed:

- Consulting on the architecture: logging and monitoring framework
- Leading the data migration subproject from a complex legacy MDM system to a newly built, automated solution deployed on AWS with Semarchy MDM
- Collecting and verifying MDM best practices, consulting directly with the MDM vendor
- Participating in the development of operations best practices with AWS

Environment: PostgreSQL on Amazon Aurora, Semarchy MDM, AWS (EC2, Lambda, ELB, ECS, Aurora, S3)

Nov-2018 - Apr-2019

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Financial Services

Project: Support with building out Data Fabric and proposing new technologies / automation framework

Team Size: 2 Delivery Managers 7 backend and data engineers 1 QA 1 Solution Architect

Project Role: Solution Architect

Tasks performed:

- Supporting the definition of the scope and goal of the project
- Onsite business requirements analysis
- Participating in the creation of the architecture blueprint for DF-Test, a Gherkin, Jenkins, Cucumber and Kubernetes based high-performance test framework for the Data Fabric, the data layer of the client's wealth management platform
- Creating the architecture blueprint for the new version of DF-Server, database and DF-Query, the data ingestion, data storage and data query layers of the platform. As a differentiator from the previous version, it is a fault-tolerant, highly scalable system using Apache Kafka, Kafka streaming for data transformations and enrichment and MarkLogic+FoundationDB as a hybrid storage layer
- Supporting the offshore development team

Environment: MarkLogic, FoundationDB, Apache Kafka, Kubernetes, Jenkins, Cucumber, GitHub, Java, Kafka Streaming

Jun-2017 - Oct-2018

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Financial Services

Project: Management consulting on the Big Data strategy of the bank. Delivering two projects on Cloudera Hadoop (Payment analytics and Risk rating analytics); establishing Big Data governance framework; productionalizing the environment

Team Size: 5 software engineers, 1 QA, 1 solution architect

Project Role: Solution Architect

Tasks performed:

- Author of the Big Data strategy of the bank, outlining future roadmap of platform services
- Management consulting on the business enablement of Big Data solutions for the commercial wing of the bank (real-time decision support with data analytics, sales prospect identification, fraud detection)
- Consulting on data governance: supporting the production operation of the complex environment by defining data governance processes through 4 clusters, release processes with Continuous Integration best practices, code promotion and scheduling procedures
- Kicking-off the development subprojects: business analysis, formulizing scope in terms of an Agile backlog to the company's issue tracker, Version 1; negotiating the scope with the stakeholders through leading in-person sessions
- Defining the productionalized architecture and data flow of two data analytics projects - historic payment analytics (wire, ACH and purchasing card data, never analyzed before) and risk rating analytics for regulatory compliance
- Participating in the development processes
- Kicking off EPAM lead data projects with the commercial, retail and wealth management groups of the bank

Environment: Hadoop, Hue, Toad, Hive, Impala, Spark (PySpark, Scala, SparkSQL)

Apr-2016 - Jun-2017

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Independence Blue Cross

Project: Establishing a Hadoop data lake around electronic medical records of one of the largest healthcare provider of the US

Team Size: 6 Big Data Engineers, 3 Data Analysts, 1 Project Manager, 2 Solution Architects

Project Role: Solution Architect

Tasks performed:

- Management consulting on Big Data solutions, data lake usage and agile processes
- Designing the data lake solution including components for data storage, analytics, log management
- DevOps around Linux, including security stack for Hadoop
- Delivery management around SDLC tools and processes with the distributed team
- Consulting on data governance (confidentiality, integrity, availability) of the Hadoop cluster
- Elaborating security requirements for the system to comply with healthcare sector standards

Environment: Hadoop, HBase, SolR, Hive, Spark, Big Data stack with IBM IOP + BigInsights

Mar-2017 - May-2017

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Independence Blue Cross

Project: Healthcare provider fraud detection on Big Data platform

Team Size: 1 Delivery Manager, 1 Data Scientist, 3 engineer, 0.5 SA

Project Role: Solution Architect

Tasks performed:

- Data governance consulting
- Data ingestion business requirements elaboration and implementation
- Data cleansing of confidential health-records
- Data quality enhancements for health-records that are a non-match for the HL7 standard

Environment: Hadoop, Hive, HBase, Teradata, MsSQL, Hadoop, Sqoop, Spark

Nov-2015 - Feb-2016

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Bloomberg

Project: Latency analysis of market data distributed through a world wide network of low latency parser machines. Creating a Hadoop based data storage and analytic system for large volume of logs. Proof of concept evaluation of low latency technologies on the above problem with Druid and Spark

Team Size: 2 Big Data Engineers, 2 Python Engineers, 1 Business Analyst, 1 Project Manager, 1 Solution Architect

Project Role: Solution Architect

Tasks performed:

- Designing the solution, defining building blocks, blueprints, use-cases and ETL flow
- Defining the technologies used and development processes
- Partially assigned on business analysis and DevOps tasks
- Establishing the operation environment, building Linux based Hadoop clusters on cloud, providing a portable Docker based solution for delivery
- Consulting with and supporting the client on the system's development and operation details and their requirements

Environment: Hadoop, Docker, EPAM-Cloud, GIT, Hadoop, Hive, Spark, Druid, Java, Python

Aug-2015 - Oct-2015

Solution Architect, EPAM Systems, <http://www.epam.com>

Customer: Privalia

Project: Audit of the system of Privalia, a leading latin market on-line retailer

Team Size: 5 Architects, 1 BA

Project Role: Lead Data Auditor

Tasks performed:

- Auditing ETL systems for the proprietary system
- The consulting / audit project included the following activities
- Scope and stakeholder analysis
- System identification, ETL flow analysis by expert interviews, document walkthroughs and code reviews
- Creating an architecture map on data systems
- Providing findings in the format of a comprehensive audit report
- Sharing recommendation taking into account enhanced maintainability and security, decreasing redundancy and cost-effective Big Data solutions

Environment: MySQL, Oracle, HP Vertica, Cassandra, Hadoop, Document walkthroughs, in-person interviews, Database and Big Data technologies

Apr-2015 - Jun-2015

Business Analyst, EPAM Systems, <http://www.epam.com>

Customer: Software & Hi-Tech

Project: IT.com - a small enterprise developing service desk knowledge management solutions. Plugin development to implement a recommender engine into wide-spread customer service desk systems as a SaaS product of the company

Team Size: 1 backend and 2 frontend software engineers

Project Role: Business Analyst

Tasks performed:

- Onsite business requirements analysis
- Project coordination
- Backlog management for the service desk product's AI backend
- AI algorithm validation, learning and test dataset creation

Environment: PostgreSQL, Salesforce, Zendesk, Python, Java

Oct-2014 - Mar-2015

Solution Architect, EPAM Systems, <https://www.epam.com>

Customer: UBS Wealth Management

Project: Elaborating architecture details on migrating from RDBMSs (IBM DB2 and Oracle) to an IBM BigInsights based Hadoop data lake

Team Size: 3 software engineers, 1 business analyst, 1 QA engineer, 1 Solution Architect

Project Role: Solution Architect

Tasks performed:

- Analysis of complex architecture
- Elaborating the concept of the data lake and its integration into the current infrastructure
- Design of the Hadoop based solution
- Delivering a proof of concept on data ETL flow

Environment: IBM DB2, Oracle 11, Hadoop Hive, Apache Sqoop, IBM BigInsights Hadoop bundle, Hadoop Hive

May-2014 - Mar-2015

Technical Project Manager, EPAM Systems, <http://www.epam.com>

Customer: Internal

Project: Creating a comprehensive intra-company Big Data Training Program
https://info.epam.com/content/infoepam/en/news/career/2014/big_data_training_program.html

Team Size: Team of 3 (2 senior engineers, 1 TPM)

Project Role: TPM, big data architect, trainer

Tasks performed:

- Creating trainings (HBase, Pig, Hive, MarkLogic, Cluster Planning, Cluster Operation, Data Visualization, R, High level and technical use-cases on Big Data)
- Operation of a training Hadoop cluster
- Defining and lecturing a university course on Big Data at the University of Szeged, creating on-line test infrastructure

Environment: Hadoop, HBase, MarkLogic, Hadoop, HBase, MapReduce, Pig, Hive, MarkLogic, Big Data storage warehouse and data processing facility

Jan-2014 - May-2014

Delivery Manager, EPAM Systems, <http://www.epam.com>

Customer: Barclays UK

Project: Development of a mission critical finance software used by corporate clients of the bank

Team Size: 3 architects, 1 release lead, 6 developers on 3 remote sites; 2 India based 3rd party vendors

Project Role: Delivery Manager

Tasks performed:

- Delivery management
- QA process audit
- CMMI5 audit participation
- Keeping contact with and reporting to customer management

Environment: Proprietary system of the bank, Jira, Eclipse, Sonar, Jenkins, Java, J2EE, , Maven, HTML, JavaScript

Aug-2013 - Jan-2014

Project manager, EPAM Systems, <http://www.epam.com>

Customer: Onboard.com Llc

Project: Creating a leading, game changer on-line application based on Drupal, providing a unique experience: focusing on content with rich multimedia to turn leads into returning visitors by involving them in on-line booking. • Extremely short timeline as of business criticality • EPAM is the second vendor of the same project: takeover of an unmaintainable code; rewrite rather than refactor • Extensive experience of the client in offline publishing - consulting on how to be effective on-line • Overcoming boundaries of Drupal technology o The Onboard.com website has 50.000 subpages of 20+ different content types o Interconnected, complex data scheme - needed low-level performance enhancement solutions in Drupal and on the hosting side o Multiple Drupal modifications to comply with modern HTML5 UI

Team Size: Varying number, close to twenty engineers, multiple sites

Project Role: Project manager, various BA and QA tasks

Tasks performed:

- Defining project processes, setting up systems
- Business analysis to initiate development tasks
- Close participation in defining the technologies used to achieve maximal performance, security, SEO
- Supervision of the development process
- QA tasks to comply with technology standards

Environment: MySQL, Drupal, various web analytics and audit tools, Jenkins, GIT, Drupal, PHP, XML, HTML5, CSS

Jul-2013 - Jul-2013

Project manager, EPAM Systems, <http://www.epam.com>

Customer: Onboard.com LLC

Project: Preparatory phase of the ONB-DEVL Drupal development project. On-site elaboration of the requirements of Onboard.Com LLC - a US based client - for the enterprise cruise line booking and content site with social media integration. Takeover of a hardly maintainable code of a third party vendor

Team Size: Self - with additional help of part-time developers

Project Role: Business analyst

Tasks performed:

- Pre-sales tasks: marketing activity for EPAM to choose from multiple other candidates, preparatory work of SOW and MSA documents
- Creating requirements documentation and task-breakdown for the project including content strategy, SEO, high performance, security for personal data handling

Environment: N/A, Jira, requirements survey, brainstorming, code inspection, prototype analysis, N/A

May-2012 - May-2013

R&D IT Project Auditor, University of Szeged - Department of Software Engineering,
<http://www.sed.hu>

Customer: Internal

Project: Plan, design and operation of a web-based professional and financial IT project auditing system for a team of 120

Team Size: 3 software engineers

Project Role: Project leader

Tasks performed:

- Designing an audit ERP capable to function and integrate with heterogeneous project management systems. Managing the development and operation of the system based on Redmine project management system
- Establishing audit processes for the R&D IT projects of the organization and its spin-offs counting a team of 120 developers

Environment: MySQL, Redmine and Trac project management tools, Ruby, PHP, Javascript

Jan-2010 - May-2013

Founder, Euro-Com 92. Ltd., <http://www.euro-com.hu>

Customer: Multiple customers

Project: Realty and vacation rental web portal development in PHP and MySQL with on-line booking, payment and social media integration

Team Size: 2 software engineers

Project Role: Project leader, software engineer

Tasks performed:

- Managing the development of www.SzallasLanc.Hu, a multi-language vacation rental site with on-line booking possibility based on an availability calendar. Using PayPal for electronic payment procession
- Design and maintenance of a SEO focused vacation realty showcase portal with Facebook integration and Google Adwords campaigns

Environment: MySQL, Open-source CMS systems, Google Adwords, Google Analytics, Facebook campaigns, PHP, HTML5, CSS

Jan-2005 - May-2013

Founder, Euro-Com 92. Ltd., <http://www.euro-com.hu>

Customer: Various

Project: Various mini-projects for the web: script development, Internet marketing and SEO within Euro-Com 92. Ltd

Team Size: 2 software engineers, client's delegates

Project Role: Project leader, software engineer

Tasks performed:

- Building webshops with OSCommerce and Magento. Development of the online store of an OSH trading company with 80.000 products sold online. Integrating the online store with their custom made ERP
- Introducing SugarCRM to a small company's processes. Consulting on the requirements, customizing the solution according to the client's needs
- Using modern Internet marketing solutions: configuring multiple Google Adwords campaigns and analytics tools. Constructing Facebook Fan pages utilizing custom applications
- Designing introductory homepages for multiple companies in the region, focusing on SEO activities
- Implementing VMWare's Zimbra Messaging platform for communication and document sharing of SMEs
- Consulting on secure operation and future-proof IT solutions (e.g. virtualization, VoIP) with clients of the SME sector

Environment: MySQL , SugarCRM, OSCommerce, Magento, Drupal, Joomla, Wordpress, Adobe Photoshop and Illustrator, Google Adwords, Facebook Apps, VMWare Zimbra, Asterisk VoIP, VMWare ESXi, Oracle Virtualbox, PHP, Java, HTML, CSS

Oct-2012 - Apr-2013

R&D IT Project Auditor, University of Szeged - Department of Software Engineering,
<http://www.sed.hu>

Customer: ELI ALPS Attosecond Laser Center

Project: Elaborating the IT operation concepts of the ELI ALPS Laser Center

Team Size: 3 DevOps

Project Role: Main author, coordinator

Tasks performed:

- Main author of the concept on IT operation of the ELI ALPS Attosecond Laser Centre
- Responsible for creating a summary on all IT operation aspects of the grandiose project (including but not limited to: multi-tier petabyte capacity storage, cloud-combined data warehouse; 1000 CPU core super computer for scientific data procession; IT security; services for 300 co-workers with various security classification; laser control environment; project management system and ERP)

Nov-2009 - Jul-2012

Software Quality Consultant, Infopolus 2009 Ltd., <http://infopolus2009.hu/en>

Customer: Internal

Project: OpenDesktop - Quality assurance of the Ubuntu fork OpenDesktop Linux distribution used by wide range of governmental offices as a MS Windows and Office alternative

Team Size: 20 software engineers, distributed national locations

Project Role: Project manager

Tasks performed:

- Managing the development of an Eclipse-plugin used for Java and Python static code analysis
- Monitoring the code base of OpenDesktop. Detecting critical parts of the code by measuring source code metrics, detecting coding rule violations, bad code smells and code duplications. Alerting the development teams on quality problems
- Creating quality assurance methodologies for the development teams

Environment: Linux, OpenOffice, Apache, Samba, ProFTPD, OpenSSL, Static code analysis, Eclipse plugin development in Java, Python, Linux Bash and AWK scripting

Sep-2011 - May-2012

Software Quality Consultant, FrontEndART Software Ltd. (spin-off of the University of Szeged) ,
<http://www.frontendart.com>

Customer: Hungarian Academy of Sciences

Project: MTMT version 2 - creating the software development specification of the official web-based public library of all Hungarian scientific articles maintained by the Hungarian Academy of Sciences

Team Size: 3 senior technical writers

Project Role: Project Manager

Tasks performed:

- Coordinating the requirements analysis and specification writing activities
- Elaborating requirements by conducting personal interviews and web-based surveys, negotiating with multiple stakeholders (amongst them: delegates of all Hungarian Universities)
- Creating a web-based survey system, analysis of the results

Environment: Interactive mock-up screen planning, software usability evaluation (desktop and mobile), survey logic design and implementation

Apr-2011 - May-2012

Software Quality Consultant, FrontEndART Software Ltd. (spin-off of the University of Szeged),
www.frontendart.com

Customer: Internal

Project: R&D of a benchmark based, domain specific software quality model. Client-server solution capable to handle different models built by experts and to automatically create a domain-specific database of code quality measurements used as a benchmark. A mathematical model was constructed that is used for grading the source code's quality compared to a benchmark of other domain specific code. The grading give details on the ISO/IEC 25000 software quality properties (Maintainability, Analyzability, Changeability, Testability and Stability) of the source code

Team Size: 7 researchers

Project Role: Co-author, software engineer

Tasks performed:

- Participation in the design and implementation of the model and prototype tools
- Co-author of two academic articles
- A Cost Model Based on Software Maintainability
- ICSM (International Conference on Software Maintenance) 2012, Riva del Garda, Italy
- Authors: Tibor Bakota, Peter Hegedus, Gergely Ladanyi, Peter Kortvelyesi, Rudolf Ferenc, Tibor Gyimothy
- A probabilistic software quality model
- ICSM (International Conf. on Software Maintenance) 2011: 243-252, Williamsburg, VA, USA
- Authors: Tibor Bakota, Peter Hegedus, Peter Kortvelyesi, Rudolf Ferenc, Tibor Gyimothy

Environment: PostgreSQL, Eclipse, C/C++, Java, Hibernate, static code analysis

Oct-2010 - Nov-2011

Software Quality Consultant, University of Szeged - Department of Software Engineering, <http://www.sed.hu>

Customer: World leading multinational company from the finance sector

Project: Introducing a vendor quality gate for a major multinational company of the finance sector. Custom Java and C++ solution fit for the processes of the company. With the help of the tool the IT Configuration Management group is able to assess PL/SQL and Java solutions of the vendors by assessing the code quality and changes - if those align with their investments. The source code quality assessment solution is able to provide results even with no code handed over, using vendor side assessment and cryptographic seals as a warranty on the analysis of the right version of the code. The client-server solution uses a persistent DB as a backend, runs on Tomcat and generates a portable HTML based report with JavaScript for effective sorting of large amounts of datasets on the client's side

Team Size: 7 software engineers and 3 QA engineers

Project Role: Project manager

Tasks performed:

- Elicitation of the requirements for the complex quality gate development project; ensuring the compliance with legal regulations and security needs
- Managing the software development lifecycle
- Consulting with the stakeholders of the company and its vendors, resolving conflicts amongst the customer, the third party vendors and the QA development team

Environment: PostgreSQL, PL/SQL, Java, C/C++, static code analysis, Shell scripts, Hibernate

Mar-2010 - Oct-2010

Project manager, University of Szeged - Department of Software Engineering, <http://www.sed.hu>

Customer: World leading multinational company from the finance sector

Project: PL/SQL and Java code quality assessment and refactoring for a major multinational company of the finance sector

Team Size: 2 engineers and 2 software quality consultants

Project Role: Project manager

Tasks performed:

- Managing the development of a static analysis tool chain capable to assess low-level source code properties
- Monitoring the changes of the codebase for 3 months (encompassing 9 major versions)
- Presenting quality trends, recommending steps for the vendors on raising the quality of the system

Environment: Oracle , PL/SQL, Java, static code analysis

Jun-2005 - Jan-2010

Engineering IT Professional (part-time), Foszer-Electric Plc.

Customer: Internal

Project: Network design & plan, Secure IT operation at Foszer-Electric Plc. (medium sized construction company with multiple branches in the country)

Team Size: 3 system operators

Project Role: Engineering IT Professional

Tasks performed:

- Design and maintenance of the distributed TCP/IP network, Cisco routers and internet servers for security and communication
- Building Linux based firewall, mail, web and collaboration servers, intranet portal and VPN for remote offices
- Developing PHP applications (Squirrelmail webmail customization and a Sharepoint alternative with open-source software)
- Participation in IT support and helpdesk tasks for the more than 150 employees of the company

Environment: MSSQL, PHP; Linux: Asterisk VoIP, Apache, MySQL, OpenSSL, Postfix, Dovecot, Shorewall, Bind DNS, DHCPd, OpenVPN

Jan-2009 - Oct-2009

Software Engineer, GE Healthcare, <http://www3.gehealthcare.com>

Customer: Internal

Project: MRI based abdomen segmentation image processing algorithm development and integration - R&D project (General Electric)

Team Size: 14 software engineers, distributed around the globe

Project Role: Software Engineer

Tasks performed:

- Researching and developing digital image processing algorithms, mainly for MRI DICOM based segmentation
- Connecting the teams of the international MRI segmentation project (US, India, Hungary)

Environment: Java, C/C++, ITK, VTK, DICOM, image processing

Jan-2002 - May-2005

Founder, Mxi.Hu

Customer: Internal

Project: Creating a PHP portal system - Mxi.Hu The first free-portal-for-everyone system in Hungary, started in 2002, active till 2005

Team Size: 2 software engineers

Project Role: Programmer

Tasks performed:

- Introducing new ideas to the own concept
- Tailoring the PHPNuke based content management system to be able to handle multiple instances available to administer freely after a registration by the users
- Design and maintenance of the company's secure IT infrastructure: two high bandwidth servers
- Configuring and running CPC ad-campaigns

Environment: MySQL, PHP; Linux: Apache, MySQL, OpenSSL, Postfix, Heartbeat, Shorewall, Bind DNS, DHCPd, OpenVPN