

Saint Petersburg, Russia
 currently resided in Batumi, Georgia
 Phone: +7 (921) 942-8310
(please contact WhatsUp or Telegram messenger)
 E - mail: dentsi@yahoo.com
 Web-site: www.emisdb.ru
 Skype: denis_emis

EXPERTISE

Direction 1: Internet programming, development of Internet applications

I have quite good expertise in Internet sites and Internet applications development and implementation. My main specialization is complex back-end web application with the ample use of interactive elements on modern platforms.

My main technology for web software development is Yii Framework, YII 2. My development attitude is built on the SOLID principles and based on the design patterns accepted as the common practice in contemporary programming. The use of MVC pattern in the framework significantly reduces development costs and thus leaves open the possibility to preserve the flexibility of the technology.

All front-end side is built on the responsive web design principles. I extensively use Bootstrap framework.

The development of websites and applications is conducted with the use of the set of big variety web technologies: JQuery, JQuery UI, Ajax, Google Map API, Yandex Map API, Post Affiliate Pro and so on. Have some experience in the Vue.js frontend framework programming.

I have experience in creating and editing existing sites based on CMS Joomla and Wordpress.

Recently I was fully involved into the cutting edge of the contemporary web industry as low-code rapid application development and delivery platform OutSystems Platform: 3 years of using this technology, Associate Developer certified specialist

Big experience in REST API development and other side API integration.

The project development basically is conducted in local environment provided by the Docker with the extensive use of Git flow and CI/CD tools.

For last 7 years I was involved in the team work based on the Agile principles with the Scrum style process. Wide variety of project management tools (Jira, Rally, Trello, Redmine) and communication tools (Slack, Google and Office 365) were practiced during this period.

Direction 2: Databases, accounting systems, enterprise management systems

Database design and maintenance, software development and implementation for accounting, warehouse and business control and operations. Big experience in multi-user control computerized system development for commercial, industrial, transport and service industries. Big variety of multi-functional enterprise management systems were developed and implemented. These systems provided

primary document development, operational and accounting control, business analysis tools and enterprise decision-making process. They also included features of enterprise resource planning (ERP-system), personnel management system, customers and counterparties service and contact maintenance, financial planning. Some experience in software integration of existing business control systems with data exchange technology within one framework or between remote systems (via the Internet). Commerce, warehouse equipment (barcode scanners, cash registers, QR-code technology and so on.) were also integrated for the developed systems. Now there are a number of original accounting systems and enterprise management systems in the field of transport, production, advertising, wholesale and retail trade are available. They may be used as a basis for new projects which provides saving on the project cost. Development carried out on Windows 9 x, 2000, XP, NT, Linux operating systems with the use of Access, MS SQL Server, MySQL, PostgreSQL, 1C: Enterprise databases. A number of my own original designs are available for the purposes of:

1. Keeping records of the company in the field of services and advertising (replicated database based on Access 2000, MS SQL Server)
2. vehicle fleet state monitoring (user database based on Access 2000)
3. production company resources Control (1C)
4. logistic tools for business operation
5. record-keeping and documentation for public health surveillance services
6. a wide range of systems for data exchange standard applications 1C and other accounting systems based on customer development
7. internet systems for business procedures cooperation

Direction 3: Control systems for industrial and process control equipment

The industrial equipment and control systems software creation and implementation. I have experience in the monitoring and maintenance systems development for equipment of any complexity and any manufacturer.

For several years I worked as a senior engineer in the project of high reliability and high accuracy system development (Air traffic control systems). At the request of the customer, I can plan, develop and implement a system necessary for the control and management of line production or technological process (including remote access), to monitor security systems to control the flow of various kinds (eg. transport). The project may include a complete scheme of development: development of communication circuits involved in the equipment, installation and configuration of the necessary equipment, creating control programs and databases, creating an interface (including graphics) for the operator control system, personnel training, technical support. It is also possible participation in projects together or as part of other groups and work on one or more components of a larger project. Database design can be done on any system on request. There are design based on QNX OS systems written in C ++, a gui Photon, using DBMS PostgreSQL, the exchange of data via the communication ports in the system based on a network of industrial computers. There are system

designs on the basis of OC Windows 9 x - XP, Windows NT in C ++ (using the library MFC), at Visual Basic software to exchange data via the multiport boards, using a DBMS MS SQL Server and Access. For more details, see the section of completed projects.

Skills in computer technology:

Internet and World Wide Web:

	<i>year</i>	<i>experience, years</i>
HTML	1995	28
HTML 5	2013	10
CSS	1997	26
CSS3	2013	10
JavaScript	1998	25
PHP	2004	19
JQuery, Ajax, JQuery UI, Google API, Yandex API	2007	16
Yii Framework, Yii 2	2013	10
Codeigniter	2015	8
Bootstrap framework	2015	8
CMS: Joomla, Wordpress	2014	9
Outsystems Platform	2016	7

Project Management tools:

	<i>year</i>	<i>experience, years</i>
Git DVCS	2014	9
Project management software: JIRA, Rally, Trello, Redmine	2016	7
Docker and Docker-compose	2020	3
Commercial web products : Salesforce, Post Affiliate Pro	2017	6

Programming languages:

C,C++	RS 6000, UNIX	28	1995
Visual C++ , MFC	IBM PC	21	2002
gcc, qcc, multithreaded programming, IPC	Unix, QNX / Neutrino	20	2003
Photon App Builder	QNX 6.2 / Momentics	20	2003
Visual Basic and VBA	IBM PC, Windows	23	2000
WSH, JS, VBScript	Windows	19	2004
Assembler to Intel 8086/88	IBM PC	24	1999

Database management systems:

dBase, Fox Base	28	1995
MS Access	27	1996
SQL Server	26	1997
PostgreSQL	20	2003
MySQL	14	2009
dBase, Fox Base	28	1995

Operating Systems and Shell:

MS - DOS	30	1993
UNIX AIX, UNIX V, X - Window	28	1995
Windows	28	1995
LINUX	25	1998
QNX / Neutrino, Photon	20	2003

Fluency in English (studied in the United States / University Of Alabama /).
During my study in the USA acquired SSN and American Driver Licence.

EDUCATION

August 1996 - 2000	St.Petersburg University , Russia, Philological department, Computational Linguistics
August 1995 - May 1996	Alabama University , USA, Computer Science
September 1993 - May 1995	St.Petersburg University , Russia, Oriental Department
September 1989 - October 1991	St.Petersburg University , Russia, Economic department, Economic cybernetics

PROJECTS

Period:	December 2022- February 2023
Organization:	The Invento Labs(Hungary) https://invento-labs.com/
Objective:	Web-based application for psychological help.
Technology:	HTML, JavaScript, PHP, Vue.JS, Yii 2 Framework, Docker, ElasticSearch
Description:	Worked as a senior developer for the full-scale interactive system for psychological help: https://pinga.app/

Period:	July 2022 – November 2022
Organization:	GCN real-estate agency: http://agent.gcn-spb.ru/ (St. Petersburg, Russia)
Objective:	Web-based full-scale real-estate agency CRM system
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii Framework, Docker
Description:	Worked as a system architecture and senior developer for the full-scale business information system for real-estate agency. Project involved a lot of REST API technology implementation and XML export-import procedures.

Period:	April 2020- June 2022
Organization:	Service Central(Tulsa, USA) https://servicecentral.com/
Objective:	Web-based application for retail repair business.
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii Framework Docker
Description:	Worked as a senior developer for the full-scale business information system for retail repair business: RepairQ.. https://repairq.io/

Period:	2019-april 2020
Organization:	Nash. travel (Россия): https://nash.travel/ (St. Petersburg, Russia)
Objective:	Web-based application for full-scale hotel booking and property renting.
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii 2 Framework Docker
Description:	Worked as a system architecture and senior developer for the full-scale business information system for hotel booking and property renting.

Period:	2019
Organization:	Academs nab (St. Petersburg, Russia)
Objective:	Web-based application for corporate business control systems integration.
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii 2 Framework
Description:	Worked as a system architecture and senior developer for the full-scale business information system for hygiene product supplier.

Period:	2016 April - 2019
Organization:	eSystems Nordic Oy (Finland)
Objective:	Various project in the company with the use of Outsystems Platform
Technology:	Outsystems Platform, HTML, JavaScript, JQuery, Ajax, Bootstrap 3
Description:	Work as Software Engineer for various projects in the company.

Period:	2015 October - 2016 April
Organization:	http://cherrytours.com/ , http://cherrytours.de/ (Germany)
Objective:	Web-based full-scale tourist industry informational system
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii Framework , Bootstrap 3, GitHub
Description:	Web-based information system for tourist industry. Worked as a system architecture and senior developer for the full-scale business information system for tourist industry company.

Period:	2015 June - September
Organization:	http://www.tourradar.com/ (Vienna, Austria)
Objective:	Web-based full-scale tourist industry informational aggregate system
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Codeigniter framework, Bootstrap 3, GitHub, Bitbucket
Description:	Web-based aggregate information system for tourist industry. Worked as a system developer in the team of web developers of the growing internet startup based in Austria.

Period:	2014 May - 2016 April
Organization:	Termofit (St. Petersburg, Russia)
Objective:	Web-based application for corporate business control system
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii Framework
Description:	Web-based system for internal use. Back-end application for document flow control, finance reporting and customer service control. Site is designed with the use of Yii Framework, JS and JQuery, JQuery UI.

Period:	March 2014 - December 2014
Organization:	Back-end web portal 2dmart, (St. Petersburg, Russia)
Objective:	The development of Internet-based applications such as “QR-code trade” http://2dmart.com/ru/ , http://dev.2dmart.com/dmart/
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yii Framework
Description:	Creation of the original web application for the operation of the registered users system 2dmart. Web service provides sharing, search and implementation of business processes to the trading on the basis of QR-code technology. Operation mode back-office for goods and service providers. Implemented to work with the goods, point of sale, order processing, email notification, and sms. (Front - office system introduced a mobile application 2DMart). Site is deployed on a test site. It was designed using Yii Framework, JS and JQuery, JQuery UI.

Period:	October 2013 - January 2014
Organization:	Project redcrosspartners, (St. Petersburg, Russia, London, UK)
Objective:	The development of Internet-based applications such as "Affiliate network» http://redcrosspartners.biz .
Technology:	H TML, JavaScript, PHP, JQuery, Ajax, Yandex Map API, Google Map API, Yii Framework
Description:	On the basis of Post Affiliate Pro PRODUCT (http://postaffiliatepro.ru/) was created web-based application for managing affiliate programs: http://redcrosspartners.biz . The internet application for the operation of affiliate programs. operation mode back-office for traffic suppliers, and those who consume it. (Front - end system is access pages, because all of the functionality is provided in the back-office operation). Site is designed on the basis of product Post Affiliate Pro, using Yii Framework, JS and JQuery, JQuery UI.

Period:	May 2012
Organization:	LLC "Sentum security", Moscow, Russia
Objective:	Creating a web-site of the company http://www.sentum.ru
Technology:	HTML, JavaScript, PHP, JQuery
Description:	Creating a simple website of the company

Period:	October 2012 – June 2014
Organization:	Advertising Agency Elvis, St. Petersburg, Russia
Objective:	Web-application for advertising company resources management: http://bb.elvispiter.ru/
Technology:	HTML, JavaScript, PHP, JQuery, Ajax, Yandex Map API, Google Map API, Yii Framework
Description:	The company's website was created and implemented as an Internet-app for the operation of the rental of advertising media. Site engine was based on Yii Framework using the latest Internet technologies based on JS and JQuery: eg Yandex Map API, JQuery UI. The project fully utilized object system Yandex Map. Original content management system (administrative panel) was designed to work with this database.

Period:	March 2012 - November 2012
Organization:	"Ecoten" Saint-Petersburg, Russia
Objective:	Website Development Company: http://ecoten.ru/
Technology:	HTML, JavaScript, PHP, JQuery, Yii Framework
Description:	the company's website was created and implemented. Site engine was based on Yii Framework using the latest Internet technologies based on JS and JQuery: for example, 3D BeonoGlobus and JQuery UI. The content management system (administrative panel) was designed to work with the database.

Period:	May 2005 – april 2014
Organization:	Production Enterprise Termofit, St. Petersburg, Russia
Objective:	The computerized system of financial and cost accounting
Development Environment:	IBM PC, Windows NT, MS Access 2002, Visual Basic, SQL Server, Visual Basic.NET
Description:	The system of corporate accounting in a manufacturing enterprise was created and implemented. The system needed to develop and integrate a complex mechanism for the data exchange between different systems of accounting. The system works in the operation mode already within 10 years.

Period:	September 2005 – January 2014
Organization:	Advertising Agency Elvis, St. Petersburg, Russia
Objective:	The computerized trade enterprise management system
Development Environment:	IBM PC, Windows NT, MS Access 2007, Visual Basic, SQL Server, VB.NET
Description:	Improvement of the previously developed system of business control and accounting in the production and placement of advertisement products of all kinds. Introduced a complete client-server system with the mechanism of shared access. The system is fully in operation for about 10 years.

Period:	January 2011 – may 2013
Organization:	"Maine OPT", Sestroretsk, Russia
Objective:	Development and implementation of trade enterprise management
Development Environment:	IBM PC, Windows NT, MS Access 2002, 1C: Enterprise
Description:	A number of perfection in the accounting system of commercial enterprise

Period:	January 2011 - May 2012
Organization:	"Tandem Neva", St. Petersburg, Russia
Objective:	Development and implementation of trade enterprise management
Development Environment:	IBM PC, Windows NT, MS Access 2007, 1C: Enterprise
Description:	A number of perfection in the accounting system of commercial enterprise

Period:	January 2007 – may 2012
Organization:	"East tour" and trade enterprise "Shchukar", St. Petersburg, Russia
Objective:	The computerized trade enterprise management system
Development Environment:	IBM PC, Windows NT, MS Access 2007, 1 P: Enterprise, Linux
Description:	The financial and operational accounting. System was implemented for the on-line mode remote access

Period:	October 2010 - May 2012
Organization:	The company "Canadian House", St. Petersburg, Russia
Objective:	The computerized trade enterprise management system
Development Environment:	IBM PC, Windows NT, MS Access 2007, 1C: Enterprise
Description:	The system of accounting for business revenue and expenses. The system is built on the basis of 1C: Enterprise, the mechanism for calculating the estimates was developed. The exchange of data between accounting systems was made up.

Period:	June 2010 - March 2011
Organization:	"Maxuma", St. Petersburg, Russia
Objective:	The computerized accounting system, extracts and certification documents provide typed reports for government agencies to Veterinary and Phytosanitary Surveillance
Development Environment:	IBM PC, Windows NT, MS Access 2007, MS SQL Server, Visual Basic.NET
Description:	The full-featured client-server application for veterinary control, system of reporting to the main office, to take account of the incoming products, sanitary standard document development and reporting to all regulatory authorities. The app was created to specifications and under the supervision of veterinary inspection.

Period:	March 2010 - August 2010
Organization:	"Maxum", St. Petersburg, Russia
Objective:	The computerized system for logistic planning of the daily ordered production and distribution.
Development Environment:	IBM PC, Windows NT, MS Access 2002, 1C: Enterprise
Description:	The logistic system for the ordered products delivery on company transport resources on a daily basis. Route calculation. Batch document development for each car (invoices, waybills, etc.). The result is a full-functioning product. Thus, this system with the necessary changes had been introduced in the accounting system at 4 other companies.

Period:	October 2009 - May 2010
Organization:	"Maxuma", St. Petersburg, Russia
Objective:	The computerized system of meat products shipment and distribution.
Development Environment:	IBM PC, Windows NT, MS Access 2002, 1C: Enterprise
Description:	The system of accounting for revenue and expenses at the business was developed in the strict accordance to weight criteria and data exchange with the database of the refrigerator storage.

Period:	January 2007 - 2009
Organization:	Crystal Ltd., Saint-Petersburg, Russia
Objective:	The computerized system of automatic generation of estimates, technical specifications, accounting the work and material consumption at the company in the industry of housing construction and renovation.
Development Environment:	IBM PC, Windows NT, MS Access 2003, MS SQL Server, Visual Basic.NET
Description:	The system based on the input data produces estimates, calculation and specifications to the drawing data to produce a wide range of products used in the house construction, repair and decoration (stone fireplaces, steel doors and windows equipment and so on.). The system keeps track of the primary documentation, contracts, payment and delivery. The system was created in VB.NET environment as a client application to access the database MS SQL Server and MS Access. The system was intended for commercial distribution.

Period:	May 2006 - 2010
Organization:	Production Enterprise Termofit, St. Petersburg, Russia
Objective:	Development and implementation of accounting systems
Development Environment:	IBM PC, Windows NT, MS Access 2002, Visual Basic, SQL Server, Visual Basic.NET
Description:	The system of accounting for business revenue and expenses.. The server part is implemented on the basis of the Access 2003 database. The client part is realized by means of VB. NET using ADO. NET.

Period:	May 2006 - 2008
Organization:	Ust-Luga canned fish factory, Ust-Luga, Leningrad region., Russia
Objective:	The computerized process control systems.
Development Environment:	IBM PC, Windows NT, MS Access 2002, 1C: Enterprise
Description:	The process control system and control was developed. Implemented accounting system based on the standard solution 1C: Manufacturing.

Period:	September 2005 - 2008
Organization:	Advertising Agency Elvis, St. Petersburg, Russia
Objective:	The computerized stored products control system.
Development Environment:	IBM PC, Windows NT, MS Access 2002, Visual Basic, SQL Server, VB.NET
Description:	The system based on Access 2002 to work in multi-user mode with restricted access was developed.

Period:	January 2007 - 2009
Organization:	Advertising Agency Elvis, St. Petersburg, Russia
Objective:	The computerized accounting system of HR, service and cost-effectiveness of advertising media.
Development Environment:	IBM PC, Windows NT, MS Access 2002, Visual Basic, SQL Server, VB.NET
Description:	The system based on Access 2002 to work in multi-user mode with restricted access was developed.

Period:	December 2000 - 2010
Organization:	Termofit, St. Petersburg, Russia
Objective:	The accounting and resources control system for the average manufacturing plant
Development Environment:	IBM PC, Windows NT, MS Access 2000, 2002, Visual Basic, 1C: Enterprise, SQL Server, Visual Basic.NET
Description:	The computerized system of accounting and enterprise resource planning. The system makes up a set of reports for top management for the purpose of production planning, as well as to estimate the optimal materials and components purchase for the production process. The Multi-account system provides all the necessary information about current operations, income and expenses at the enterprise.

Period:	August 2003 - 2009
Organization:	Advertising company Elvis, St. Petersburg, Russia
Objective:	The computerized system for planning and financial management of the enterprise
Development Environment:	IBM PC, Windows NT, MS Access 2002, Visual Basic, SQL Server, VB.NET, HTML
Description:	The computerized system management and planning of enterprise financial resources. The system based on Access 2002 to work in multi-user mode with restricted access. For the purpose of accounting for the cash advances. The application was developed on Visual Basic. NET for access to a shared database.

Period:	December 2001 – 2008
Organization:	Research Association ATIS, St. Petersburg, Russia
Objective:	The air traffic control system.
Wednesday:	IBM PC, QNX 6.1 / Neutrino, Photon App Builder, accompanying Software in environment: Windows 9.x, C ++ V 6.0 C, with the use of MFC
Description:	Based on a previous project, a new air traffic control system for the operating system QNX 6.1 / Neutrino. The project includes: The full-scale rearrangement of the previously developed software to the new platform. The new low-level drivers and procedures were developed for the system integration with various devices (radar systems, information on weather conditions, radio system and so on.). The user interface and display graphical information creation in an environment Photon and XWindows GUI. For data on flight plans and routes were used database management system for UNIX systems (PostgreSQL). The new algorithm for tracking of aircraft was developed in order to enhance the system in terms of processing various signals (both active and passive). In the new project to use new technologies adopted for multiprocessor real-time systems: multi-threaded programming, interprocess messaging usage, the own resource managers and software interrupt handlers

Period:	April 2001 - May 2002
Organization:	Research Association ATIS, St. Petersburg, Russia
Objective:	The air traffic control system.
Wednesday:	IBM PC, MS DOS, Windows 98, Borland C ++ 4.02, Visual Studio 6.0
Description:	The air traffic control system was developed. The system is designed to work with the various devices (radar systems, information on weather conditions, radio system, etc.), necessary for the maintenance and control of the aircraft. The system is designed on a low programming level: self-developed software to manage all the resources and hardware (monitor output, receiving information from the keyboard, mouse, various manipulators, sharing information via an asynchronous adapter RS -232, RS -485, receiving information from specialized equipment). The main criterion for the development of the individual modules of the system was to ensure high reliability. The specific system of inherited classes was developed. The system is designed to operate in protected mode memory. The project was set for several groups, each performing its own task (development of hardware, software development). My own task was a target control (the core element). The work carried out since 1995. The project is designed by me alone application for complex signal simulation of aircraft for the purposes of testing equipment. The program was designed to run in a Windows environment using the technology MFC.

Period:	Декабрь 2002 - 2006
Organization:	Transport company ARP, St. Petersburg, Russia
Objective:	Development and implementation of accounting systems for large enterprises in the transport sector.
Development Environment:	IBM PC, Windows NT, MS Access 2000, Visual Basic, 1 C: Enterprise, SQL Server
Description:	Development and Programming accounting and control system for business processes in the activity of transport medium-sized companies. The system was implemented in connection with the transition of the company to a new level of activity (using multi-currency accounting system). System was developed on the basis of 1C: Enterprise for use in multi-user mode. Parallel system was developed control state vehicle fleet. The system is implemented on the basis of Access 2000, and is connected with the work of the main accounting system, implemented on the basis of 1 C: Enterprise.

Period:	December 2000 - 2005
Organization:	Production Enterprise Termofit, St. Petersburg, Russia
Objective:	The accounting and operating resources of the average manufacturing plant
Development Environment:	IBM PC, Windows NT, MS Access 2000, Visual Basic, 1C: Enterprise, SQL Server
Description:	The system of accounting and enterprise resource planning phase of receipt of materials to finished goods issue. The system reports for top management allowed to plan production according to the volume of orders for the current period, as well as the purchase of materials and components needed for the entire process. The Multi-account balances kept in stock and provide all the necessary information about current operations, income and expenses of the enterprise. To avoid re-entering information was provided by the close interface with existing enterprise accounting system implemented first on Fox Pro, and then on the basis of 1C: Enterprise.

Period:	April 2000 - April 2001
Organization:	Petrostroykomplekt, St. Petersburg, Russia
Objective:	The computerized accounting systems for large commercial enterprise.
Development Environment:	IBM PC, Windows NT, MS Access, Visual Basic, C 1 Enterprise, SQL Server
Description:	Development of a database to automatically calculate the amount of VAT subject to presentation, as well as accruals and debt prepayments. The system is designed for complex problem solving accounting, total amount of 17 people. We used some new methods for use in the enterprise with a nonlinear circuit accounting.

Period:	April - September 1999
Organization:	Gorislavtsev and Company, Saint-Petersburg, Russia
Objective:	Software development and configuration management systems database for bookkeeping, inventory and records on the orders of various companies and enterprises of St. Petersburg
Development Environment:	IBM PC, MS Access, Visual C ++ 5.0, 1C: Enterprise
Description:	Computer systems and database for accounting for commercial and industrial enterprises. commercial enterprises. Most often used by 1C: Enterprise, MS Access. For auxiliary purposes to create a program in Visual Basic and C ++.

Period:	May 1997 - April 1999
Organization:	Contract with various companies, Saint-Petersburg, Russia
Programmer, database development	
Objective:	Software development and configuration management systems database for bookkeeping, inventory and operational records in trade. Total work of the various accounting systems provided more than 20 customers.
Development Environment:	IBM PC, MS Access, Visual C ++ 5.0, 1C: Enterprise
Description:	Short-term projects for the development of computer systems and databases for accounting in trade. Most often used by 1C: Enterprise, MS Access. For auxiliary purposes to create a program in Visual Basic and C ++. Often settled related tasks (creation of local networks, improvement of procedures of the office staff)

Period:	January 1996 - May 1996
Organization:	University of Alabama, Tuscaloosa, USA
Job Title:	Programmer (while studying)
Objective:	Various programs for non-commercial purposes in the course Programming in C among UNIX, the creation of non-profit Internet sites within the site of the university.
Development Environment:	RS 6000, UNIX AIX