

Branko Kokanović

Curriculum Vitae

General

- *Address:* Gandijeva 89, 11000 Belgrade, Serbia
- *Date of birth:* 19.06.1983.
- *Sex:* male
- *Cell phone:* +38169π (+38169 3.141592)
- kokanovic.org
- *E-mail:* branko@kokanovic.org
- *GitHub:* [@stalker314314](https://github.com/stalker314314)

Education

- *Faculty of Electrical Engineering*, Department for Computer Science and Engineering, Belgrade University, Serbia.
 - Graduated on: *Binding programming system Test with Moodle LMS* with average grade 8.4.
 - (2002 – 2009)
- *Electro technical school "Nikola Tesla"*, telecommunication profile, Belgrade, Serbia.
 - Main subjects: Mathematics, Computer Science, Electronics, Analog and Digital Telecommunications.
 - Graduated on: *FHSS and DSSS Spread Spectrum analysis*
 - (1998 – 2002)

Working experience

- [Microsoft](#) – Senior software engineer (with a trip to lead role, worked on SQL core engine – predictable query performance and query optimization, as well as SQL Azure DB – survived implementing service from ground up) (2012 -)
- [RT-RK](#) – Senior software engineer (embedded software development, kernel drivers writing, Assembler/C/C++, 300 developers) (2011 - 2012)
- [Mozzart Sports Betting](#) – Software architect (Java based distributed software solution, SCRUM based development, 40 developers) (2007 - 2011),
- MikroDisk – [Mikro](#) magazine give-away DVD content manager including template generator (Python/GTK, SQLite, Cheetah template engine),
- Laboratory assistant at "Computer science" department, faculty of Electrical Engineering, Belgrade University (2003 – 2007),
- Junior programmer at [Inovacation Center](#), ETF. Worked on VB.NET information system for Bilogorac company (January and February, 2006.)

Side projects – contributions

- [LLVM/Clang](#) contributor (C++)
- [VideoLAN](#) video filter developer (C/C++/Qt),
- [Nextcloud work](#)
- [FractalDirector](#) - Fractal video generator, add-on utility for creating videos containing fractals based on [gnofract4d](#) software, now merged with it entirely (Python/GTK),
- various patches - Valknut (C++/Qt), Wikipedia (OCaml) and Videodb (PHP),
- various translations ([Serbian GNOME team](#), [Gajim](#), [mBot](#) robot project for kids, [Nextcloud...](#))

Side projects – original work

- [DocumentDBC++](#) – open-source C++ wrapper and object model for DocumentDB – now officially [endorsed](#) library from Microsoft (C++),
- [Logolovac](#), [Filmolovac](#) and [Facolovac](#) franchise of Android games (total of 200.000+ downloads from only Serbian market)
- [Mozzes](#) – Java application server and middleware framework (Java),
- [Serbian OSM Lint](#) – Open Street Map Lint checker
- [TitlYU](#) – subtitle editor/converter specifically designed for subtitles from exYU countries (C/GTK, libaspell, libiconv, gettext),
- [jDCBot](#) - Java DC Bot framework (Java),
- [Commit Warning Checker](#) – Eclipse plug in to check for warnings before commit (featured on Softpedia)

University projects

- 8254 – implementation of Intel 8254 programmable interval timer (VHDL),
- MJ2Java – lexical, syntax and semantic analyzer of MicroJava source code and MicroJava to Java source code converter (Java, BYACC/J, CUP),
- Binding programming system Test with Moodle LMS (B.CS. thesis) - exam question/test importer and exporter from internal faculty LMS software (named TestBase) into SCORM/QTI format and several others (C++/MFC, XSLT, PHP),
- Telecommunication channel simulator – complete simulator and graphical analyzer for telecommunication channels with various modulations (QPSK, BPSK...) and channel models (Python/GTK),
- Fiscal Cash Register – Complete hardware and software design and technical documentation. Consisted of two hardware implementation, one based on Intel 8086 with supporting integrated circuits, other based on Intel 8051 micro controller. Schemes drawn in Altium Designer, assembler program for 8086 system written in Emu8086 Assembler and program for 8051 system written in μ Vision KeilC. Cash register simulator written entirely in assembler (x86 ASM, KeilC),
- Resava – Plagiarism detection system, MOSS frontend (PHP, bash),
- Enigm software – Software for generating crosswords in Serbian language and common Serbian pattern, including database of 15.000 words and descriptions (C, WinAPI)

Summary of qualifications

- Excellent knowledge of code writing in following programming languages: C, Java, Python, C++, Microsoft .NET languages, PHP, Pascal, Assembler (various flavors), Visual Basic, Shell scripting (sh/bash), Java Script/AJAX, Delphi,
- Excellent SQL and database knowledge (MSSQL, Oracle and MySQL in particular),
- Good knowledge of UML modeling and design patterns,
- Good knowledge of computer architecture and organization,
- Advanced knowledge of Linux administration

Other

- Programming languages on level of recognition: OCaml, Caml, Perl, Cobol, Ada, Lisp, Ruby,
- Worked with various public domain libraries, interfaces and applications and contributor of various patches and translation,
- Basic knowledge of Windows administration,
- Development environments: Eclipse, Vim (GVim), NetBeans, JDeveloper, KDevelop, MS Visual Studio, Bloodshed Dev-C++, Code::Blocks,
- Excellent knowledge of XHTML and Transitional HTML, web page writing (excluding web page design),
- Additional tools: Open Office, Gimp, Orcad PSpice, ProtelDXP, Altium Designer, Macromedia Dreamweaver, and many others,
- Graphical user interface toolkits: GTK, Qt, FLTK, native Windows (WinAPI), MFC,
- 4th at 'Pet dana na Javi' (Five days on Java) competition (five days given to create full web application using SOAP) amongst more than 100 competitors,
- Administrator and co-creator of local network with 20 users/neighbors (Linux based server, Internet connection sharing, including various other services),
- Redaction member of faculty magazine "Generator" (formerly "Otpornik"),
- Valid driving license for vehicles up to eight seats and 3.5t (B),
- US Visa
- Mensa member

Languages

- English (excellent),
- German (basic),
- Serbian (native)