

IGOR JOVANOVIĆ

Waaldijk 28
3024CW, Rotterdam
+310633031780

Igordr3@gmail.com | <https://www.linkedin.com/in/igor-jovanovic>

Qualifications

- Strong programming skills in Python, XQuery, VBA, MS Access, Stata, familiarity with MySQL, NoSQL (MarkLogic), JSON / XML manipulations, PHP, JavaScript, HTML, CSS and Java (1.8 concepts)
- Experience in loading data from desperate data sets, transforming/cleaning/restructuring and loading it into data warehouses (Enterprise Data Hub/MarkLogic Data Hub Framework)
- Solid background in finance/econometrics and good recognition of financial-markets related concepts
- Searching, indexing, security setup, querying and reporting using XQuery in MarkLogic, familiarity with business intelligence tools such as Micro Strategy, PowerBI, Tableau
- Experience in Scrum/Agile/DevOps Development process

Skills

- IT Skills: **NoSQL/SQL/MarkLogic/XQuery/XPath/SPARQL**. **Python** knowledge focused on statistical/quantitative/data analysis applications – ability to write financial algorithms, familiarity with numpy, pandas, statsmodels and other packages. Quantopian.Com markup familiarity. **Java** (1.8) concepts recognition. **Business intelligence tools**: Micro Strategy, Knowi, Tableau, PowerBI, AppDynamics. **CI/CD**: Gradle, Maven, Jenkins, Git, BitBucket, REST services, Apache NiFi, Swagger API. **Editors**: IntelliJ, Eclipse, SubLime. **Advanced skills in VBA** (Excel) – ability to write macros, functions for data analysis purposes; simulations and financial markets data familiarity; construction of dynamic dashboards for smart reporting. **Access** and Excel integration through VBA with possibility of user forms in both programs; data structuring via Access; SQL queries embedded in dynamic Access report; reports design. Familiarity with **STATA** statistical software, ability to write loops, combine data from multiple sources (merging, splitting, appending). **Web-based programming languages**: PHP, JavaScript, HTML, CSS. **Other platforms**: WordPress, IBM Connections + Lotus Notes, Confluence, Cascade, SharePoint, Jira. **Data sources**: Familiar with gathering/analyzing/manipulating Reuters Datastream data. **OS**: Linux (RedHat/SuSE/Ubuntu), Windows, macOS. **Security**: Kerberos, LDAP, ActiveDirectory

Experience

MarkLogic

Utrecht, The Netherlands

Senior IT Consultant

June 2019 – Present

- Working on the clients' projects by providing the development services as well as the education and training of the internal team. Exposure to the international work environment and frequent travels to the destination of the clients. Main technologies that are used concern MarkLogic, Data Hub, XQuery, JavaScript, and Java.
- **Clients**:
 - Smith & Nephew (UK) - 6 months
 - Credit Suisse (Switzerland) - 2 weeks
 - APG Pension fund (The Netherlands) - Present

ABN AMRO

Utrecht, The Netherlands

IT Development Engineer

March 2018 – May 2019

- Engaged in a BigData project that involves development of a complete data warehouse solution (including CI/CD) for collecting/restructuring/securing/harmonizing and presenting the data from different data sources. The application is built on XQuery within MarkLogic DataHub Framework and a business intelligence interface. The complete solution consists of a pipeline that delivers semi-structured XML/JSON documents (through batches) to MarkLogic database. After the ingestion, documents are harmonized (restructured and reduced to the common form), stored in a bi-temporal fashion and made accessible to the final users through REST API. The application inherits complex users structure (from other sources) that is embedded into MarkLogic (security/users/roles) resulting in a data-centric security, that is, every user is allowed to see only a fraction of the available data. The project was developed in a way that offers a complete track of ingested and harmonized documents (reconciliation system) as well as missed files tracking and database reshuffling in case of

disordered ingestions/harmonizations. The final reports are served through a business intelligence tool (aiming for a single sign-on approach). **Impact:** Tremendously improve the decision making process that bases on secured/accurate/complete reports which combine the data from various sources and provide a view that is not available in any of the individual sources (pure synergy effects).

TCF Data Analyst

April 2017 – February 2018

- Created an internationally used VBA application for collecting the data from foreign branches, processing the data, and producing a set of automated reports (content/graphs and computational wise automated) for management-level reporting. The underlying process of collecting the data has several layers of security, starting from checking the data format, structure, quality to check logical mistakes. The tool also has a built in function for communicating with foreign offices via email – directly from excel application – as well as request for changes system. **Impact:** Time needed to produce the reports has reduced dramatically, accuracy has increased substantially due to security layers and quality checks.
- Developed a VBA-GUI/Access Database application for storing information about the transactions (on the regulator's request - DNB - De Nederlandsche Bank). The app consists of two parts, a GUI interface for writing the transactions-related data to the database and also a revision option to collect from the database mistakenly written or record that has been changed. The second part involves very comprehensive reporting Access Form that connects to the database and runs queries against it. Ultimately, the bank is able to provide the reports on particular product/location/sector/person/date/time as well as the reports that contain different combinations of transactions' parameters/values of interest. The reports are easily exportable in PDF format, based on selected criteria. The project was also branded and styled in accordance with corporate colors. **Impact:** High data quality standards as a consequence of numerous security measures and comprehensive reporting functions that allow for the broad-range reports as well as for very specific reports, providing high transparency level.
- Built a Trend Analysis tool for tracking clients' balance sheet/income statement positions through time. The tool is based on a report from internal system that is generated automatically after the values update. The application feeds with those reports and produces a dashboard with flexible graphs and tables that can be manipulated through the set of buttons/checkboxes (user-friendly interface). It also allows for custom data entry as well as different financial ratios calculations. **Impact:** A uniform way of presenting quantitative information about clients that has been standardized for all local/foreign branches.
- Significantly improved VBA-based Dashboard for tracking intensity of employees (in Holland and abroad). **Impact:** The time of compiling the report has been reduced substantially and the process is performed programmatically.

Freelancer at Fiverr.Com

Web designer and developer

June 2008 – Present

- Programmed and developed hundreds of different websites across various web platforms
- 688 positive reviews from international clients available at <https://www.fiverr.com/igordr>
- Average 5/5 stars rating

Education

Vrije Universiteit

MSc of Finance (minor econometrics)

Amsterdam, Holland

Sept. 2016 – July 2017

- Relevant courses: Empirical Finance, Asset Pricing, Derivatives, Institutional Investments and Asset Liability Management, Financial Markets and Institutions
- Thesis topic "[Dynamic Models for Dutch Stocks Market Liquidity Forecasting](#)", supervisor [Andre Lucas](#) – reference on the demand.
- Co-author of the article "[The Art of Transformation: Will Banks Keep Up?](#)" published by the University on the official research blog.

University of Belgrade, Faculty of Economics

BSc Hons. Finance, banking and insurance

Belgrade, Serbia

Sept. 2012 – June 2016

- Relevant courses: Statistics, Investments, Banking, Financial and Actuarial Mathematics, Economic and Mathematical Models
- The best student scholarship award by fund "Dositeja"

- Among the top 5% of the best students with an average grade 9.18/10
- Course completed 4 months before an official end of academic year
- Participated in a trading competition and won monetary reward based on the best trading results among group of 20 selected students.

High School of Economics and Trade of Krusevac
Business Administrator

Krusevac, Serbia
Sept. 2008 – June. 2012

- Relevant courses: Statistics, Mathematics, Informatics
- Maximum grade on the matura exam (high-school exit exam)

Extracurricular activities

- “Building XQuery applications with Marklogic” seminar 21.02 – 24.02.2018, Den Haag
- Conference and workshop on machine learning and AI by GOOGLE (November 2017)
- First monetary prize (among 30 participants selected by top GPA score criterion) in order book based trading exercise (June 2016)
- First prize, International Economic Student Summit 2015 (October 2015) Case Study „Youth Friendly Banking Products“, sponsored by Vojvođanska Banka (National Bank of Greece)
- Seventh place of 50 teams, Ernst & Young (Dec 2014) Case Study: „Learn Today Lead Tomorrow“
- First place, Professional Competition (April 2014) „How to initiate Serbian Economy“, Faculty of Economics University of Belgrade
- CEO Conference (November 2015) Faculty of Economics University of Belgrade
- Student Parliament (2011-2012)

Languages

- Mother tongue: Serbian (understand also Croatian, Bosnian), English (Proficient - TOEFL iBT test score 98/120), Dutch (B1 level), German (Beginner)

Interest and activities

- Full marathon - 42KM - (the best time 04:10:11)
- Half-marathons - 21KM - (the best time 01:50:52) and mountain running
- Played soccer for the best local football club – FK Napredak (2003-2010)
- Three years of intensive karate training
- Red Cross blood donor and a member of Association of emergency situations (floods, etc.)



Access online version by using QR reader.