# Sergey Gritsyuk

E-mail: s.gritsyuk@gmail.com Date of birth: 17<sup>th</sup> of July 1985 (38 years)

Residence: Dubai, UAE



PhD and technology enthusiast with a passion for innovations and cutting-edge technologies. Currently IT consultant with a wide experience and understanding of various IT related fields (big data, artificial intelligence, distributed systems, data engineering, data analysis & mobile technologies). Author of «NoSQL databases» and «Big Data» courses at the National Research Nuclear University «MEPHI», Russia.

## EDUCATION

• National Research Nuclear University «MEPHI», Moscow, Russia

Postgraduate course in the field of «System analysis, control and data processing» 2007 – 2010

PhD in decision analysis and artificial intelligence, december 2011

Thesis: «Methods of multi-criteria acceptability analysis and hybrid methods of artificial intelligence in rehabilitation of technologically-radioactively contaminated areas» (in Russian)

 Nonproliferation program by Open World leadership center: Seattle-Richland-Washington DC, USA

Leadership program Graduate, august 2008

 Obninsk State Technical University for Nuclear Power Engineering (INPE), Obninsk, Russia

Department of Information systems and technologies, 2002 – 2007

Engineer of Information systems and technologies (with honors), june 2007

Thesis: «Java technologies appliance to distributed educational and methodical systems development» (in Russian)

## EXPERIENCE

• ESL FACEIT Group, Cologne, Germany / efg.gg

february 2021 - march 2024

Led the team of software engineers which built distributed e-sports tournament system for top world esports video game competitions organizer. In 2022 company was bought by Saudi Arabia's Savvy Gaming Group for \$1 bln.

Scala, Cats, Finagle, Doobie, Thrift, PostgreSQL, TypeScript, React.js, Pants

• Independent Consultant (remote / fixed term contracts), october 2014 – october 2022

o Fabuza, Moscow, Russia / Senso, Singapore

february 2021 - april 2022

Made a research study and prototype artificial intelligence algorithms for interface usability and user behavior analysis. Results of research used for the development of a new AI-driven version of the Fabuza UI analysis platform.

Python, Pandas, NumPy

o Kiwi ICT, Auckland, New Zealand

august 2021 - october 2021

Built general data processing software platform architecture for Honduras elections proposal.

o Decerns, Obninsk, Russia / decerns.com

october 2014 - october 2022

Consulting in core architecture, decision analysis methods for DecernsMCDA software. Currently it used for solving real world risk management, environmental protection, etc problems and for teaching studies at the many universities around the world (Harvard School of Public Health, University of British Columbia, Auckland University, etc).

 Department of Information and Service Economy, Aalto university, School of Business, Helsinki, Finland (remote / fixed term contract) / <u>aalto.fi</u>

may 2012 – march 2020

post doc researcher, software architect, big data engineer

o Kontoor startup / service for financial news analysis

january 2016 - march 2020

Developed MVP and general architecture for financial news analysis startup that allowed to close seed investment round from Tekes fund. Project utilize power of big data technologies and cutting-edge deep learning models to extract valuable commercial information from business news.

Scala, Spark, Kafka, Akka, Finagle, Slick, HBase, Apache Solr, Cloudera platform, Play framework, React.js

o Metsaan study / forest management model and service

may 2019 - august 2019

Built distributed architecture and implement prototype of artificial intelligence model for forest management. Modeling of forest grow process allow to predict and maximize profitability of forest areas in Finland.

Scala, AMPL

o Cargill study / prediction model for corn market

december 2018

Developed a prototype of corn market prediction model (return, interest, etc.)

 Institute of Cyber Intelligence Systems, National Research Nuclear University MEPhI (INPE), Moscow/Obninsk, Russia / <u>mephi.ru</u>

september 2012 - july 2023

#### associate professor

Author and lecturer of «NoSQL databases» course for bachelor students and «Big Data» course for master students. Advisor for student's research projects.

Scala, Apache Spark, MongoDB

CodingAndroid.com – software development studio specializing in high-quality mobile applications

september 2008 – february 2015

Co-found **CodingAndroid** studio and taken part in management and development of Android projects. Collaborated with **Sony Ericsson** and developed store application (allowed to download and buy applications, music and games) pre-installed to all Sony Ericsson Android phones sold in Russia. In 2008 our project **Beetaun** was among Top50 finalists of **Google** Android Developer Challenge I.

Android SDK, LibGDX, PHP, Codelgniter, Symfony, MySQL

IT laboratory at Obninsk Institute for Nuclear Power Engineering – National Research Nuclear University «MEPHI»

february 2006 – may 2018

chief, software architect, lead developer

o **DECERNS** / spatial decision support system - international scientific project (ISTC №3549, Russian Federal Program №14.740.11.0360)

october 2006 – october 2014

Architect and lead developer of decision support module and core decision analysis library that is used inside a Decerns software until nowadays.

Java, JSP, Servlet, JSF, Applet, Swing, Java2D, jSimpleCharts, jSimpleViz

o **d2m2** / toolkit for dredging material management, USA

february 2011 – february 2012

Lead developer of decision analysis module.

Java, Swing, jSimpleCharts, jSimpleViz

o Graphical libraries **jSimpleCharts** and **jSimpleViz** / as a part of DECERNS project

october 2006 – october 2009

Architect and lead developer of graphic Java libraries for charts and interactive interface components.

Java, Java2D

o Miscellaneous projects for university operation

february 2006 - may 2018

Managed work of developers and supported software infrastructure of university (about 500 workplaces) including web site and different web-services (phones directory, etc.)

PHP, Drupal, Laravel, Apache, PostgreSQL, MySQL, MS SQL Server, CentOS, Ubuntu, FreeBSD

### SKILLS

- Scala Finagle, Cats, Akka, Doobie, Thrift, Play framework
- Big Data Spark, Kafka, HBase, Apache Solr, Cloudera Platform
- Python CCXT, Pandas, NumPy, Flask, XGBoost, Keras
- Java JSP, Servlet, Java2D, Swing, Applet
- RDBMS PostgreSQL, MySQL
- NoSQL HBase, MongoDB, Redis
- Mobile Google Android
- TypeScript Material UI, React.js, jQuery
- PHP Wordpress, Drupal, Codelgnitier, Laravel, CakePHP
- · Collaboration GitLab, JIRA, Git, Mercurial
- OS MacOS, Ubuntu Linux, Redhat/CentOS Linux, Android, Windows

#### SCIENCE

big data, data analysis, artificial intelligence, multi-criteria decision analysis

- Developed university courses:
  - o «NoSQL databases», bachelor program of Information systems department, National Research Nuclear University (INPE)
  - o «Big Data», master program of Information systems department, National Research Nuclear University (INPE)
- Speeches on Conferences and workshops (most important):
  - o 27th International Summer Symposium on Science and World Affairs, Nagasaki University, Nagasaki, Japan, 2015
  - VII-th Moscow International Conference on Operations research (ORM2013), MSU, Moscow, Russia, 2013
  - o INFORMS 2012 Annual Meeting, Phoenix, AZ, USA, 2012
  - o The 21st International Conference on Multiple Criteria Decision Making, Jyvaskyla, Finland, 2011

- o MCDM Pre-Conference seminar, Aalto School of Economics, Helsinki, Finland, 2011
- o Open World Nonproliferation conference, Spaso-House, Moscow, Russia, 2011
- o International meeting on DECERNS project at the University of Portsmouth, Portsmouth, United Kingdom, 2010
- o Sony Ericsson meeting, Moscow, Russia, 2009
- o The 20th International Conference on Multiple Criteria Decision Making, Chengdu, China, 2009
- o Google Developer Day, Moscow, Russia, 2008

#### Publications (most important):

- Gritsyuk S., Korobov A., Radaev A., Yatsalo B. The DecernsFMCDA fuzzy multicriteria decision support system. Software & Systems. Vol. 35 (2), 2022. pp. 561– 566
- o Yatsalo B., Gritsyuk S., Mirzeabasov O., Vasilevskaya M. Uncertainty treatment within multicriteria decision analysis with the use of acceptability concept. / Big systems management. Moscow. v.32, 2011
- Gritsyuk S., Yatsalo B., Afanasev G., Pichugina I. Monitoring Network Optimization on Radioactively Contaminated Territory with the Use of Multiobjective Genetic Algorithms and Neural Nets. – Communication of Higher Schools. Nuclear Power Engineering. v.4, 2010. pp.91-102
- Gritsyuk S., Yatsalo B., Didenko V. Management of Remediation Measures on Radioactively Contaminated Territories with the use of Multiobjective Optimization. – Communication of Higher Schools. Nuclear Power Engineering. v.3, 2010. pp.55-65
- Yatsalo B., Didenko V., Tkachuk A., Gritsyuk S., Mirzeabasov O., Slipenkaya V., Babutski A., Pichugina I., Sullivan T., Linkov I. Multi-Criteria Spatial Decision Support System DECERNS: Application to Land Use Planning. - International Journal of Information Systems and Social Change, 1(1), 11-30, 2010
- o Total list includes 46 publications