



Curriculum Vitae

Informazioni personali/

Personal Information

Nome e Cognome / Name and Surname **Igor Tereshchenko**

Genere / Gender Maschio

Esperienze professionali/

Work Experiences

28/02/2021 -NGO "Enlightening Initiative" enlight.org.ua

Digitalization and humanitarian projects leader. Leading protection projects for displaced, non-displaced and returnee people affected by the war in Ukraine in multiple regions with the total funding of EUR 400,000+ Co-founded charity project alternativeway.help aiming to develop digital technology and human-machine interaction to support humanitarian aid and logistics operations during war in Ukraine IT system development for the U.S. Embassy Kyiv project on Ukrainian participant selection for U.S. Department of State exchange programs (application portal development, document workflow automation, chat-bot, seal detection, automatic plagiarism detection etc.) Designed 5+ AI-powered educational projects on the following topics: - disinformation detection in Ukrainian media value chain, - AI accessibility to public services for people with disabilities (AI-powered Virtual Assistant), - AI system assisting young learners in goal shaping, while simultaneously developing critical thinking

01/05/2015 -Consultant

- Big industry clients: NOVUS Ltd. (food and retail company), Nadra Bank, OTP Bank, Service Solutions LLC (office equipment) - IT Infrastructure Library consulting - IT Service Management software tools development - Corporate trainer to 300+ early and mid-career IT developers (Python, Java, C, C++, ?#, Android, PL/SQL, T-SQLs)

01/12/2012 - 31/08/2020 National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

Senior Lecturer - Lecturer of "Databases and Information Systems", "Designing of lectures and practical classes for disciplines: Automated Systems", "Programming Automation Systems", "Computer Science with Python", "Big Data" (1500+ students overall) - Curricula development, development of methodological materials and control tasks - Development of new courses in the department and expert in eLearning courses with blended learning principles - Annually supervised research of 36+ Bachelor students and 10+ Master students overall and provided mentorship

01/11/2017 - 31/08/2019 NATO Emerging Security Challenges Division, SPS Programme

Researcher in Information Security - Initiated research to develop systems of online information acquisition from multiple channels - Adaptive Network scanners tools - Fake news detection - Deep Learning CNN for personal psychological portrait development (Facebook, Telegram, Instagram, Twitter) - Personal information crawling and storing in high distributed databases - NLP for text classification by categories and entities extraction - Shaped team of 7+ junior researchers who were trained to conduct research during 2 weeks from scratch

01/03/2017 - 31/12/2018 University of Luxembourg, Faculté des Sciences de la Technologie et de la Communication
Visiting Researcher with Erasmus+ Partnership - Investigated an Interdisciplinary Research on computer-aid simulation and image-guided for a mini-invasive kyphoplasty in osteoporotic patients. The platform is deployed in Luxembourg Hospital CHL (Unit of Prof. F.Hertel), and it is currently used in decision-making. The segmentation techniques are based on gradient voxelization approach and 3D CNN UNET (AI Architecture). Novelty approaches of CNN and active shape model combination for segmentation. Platform was tested with a research collaborator Prof. M. Audette (Old Dominion University, Norfolk, VA) for preliminary research for NSF-CASIS - Investigation involved: Data mining, development of open-source Finite element methods, modeling of Fracture and Fatigue - Digital twin was deployed on European Testbed PetaFlop HPC (Iris) and embeds advanced real-time methods Platform was based on: Python, NoSql, Matlab, Rodeo, C++ The project received funding from ERC StG RealTCUT (S.Bordas PI)

01/07/2015 - 31/07/2018 Politecnico di Milano, Biomechanics Group of the Department of Electronics, Information and Bioengin
H2020-RISE-AMMODIT Researcher - Marie Skłodowska-Curie Actions (MSCA) Fellowship nominee
- Developed mathematical models and software for segmentation tools for vessel network for cardiovascular applications, and it lead to scientific publication on peer-reviewed journal - Data mining (Deep learning, NoSQL Data Warehouse: Cassandra) - Image recognition and segmentation (Neural network: Caffe, TensorFlow) - Mathematical modelling (Matlab, Python) - The project received funding from H2020-RISE-AMMODIT - Kyiv Polytechnic Institute host university organizer: conferences program development, event management (100+ researchers from Ukraine and EU)

01/05/2022 - European Crucible 2022 Project

Researcher at MAVKA: Co-creative gamified storytelling for trauma project - Initiated and co-developed "MAVKA: Co-creative gamified storytelling for trauma" project, in collaboration with Dr Mel McKendrick, Heriot-Watt University; Dr Carolyn Jess-Cooke, University of Glasgow; Dr Mathieu Chollet, University of Glasgow - The aim of the project is to develop a serious game to provide children and young people affected by war and conflict with an opportunity to engage in using mixed media to process emotion and trauma. This application would provide young Ukrainians directly experiencing or displaced by the war, a means for distraction and a vehicle for expressing emotion even when they may not be ready to talk directly about their own experiences.

01/12/2007 - 31/12/2012 Space Research Institute of Ukraine, Space Plasma Department

Research Assistant - Applications for calculating physical processes - Database development and support

01/07/2009 - 31/03/2010 UNTC LTD

Software developer - Development of technical specifications for software Software development: interfaces to Oracle and Firebird databases, Delphi language, database synchronization, integration of different databases into one system. - Administration of information systems: billing system (Oracle, PL / SQL) - Business analysis of company employees regarding information systems: writing applications for billing (Delphi, PL / SQL)

Istruzione e formazione/ Education and Training

01/09/2009 - 29/02/2012 Master of Applied Mathematics, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

01/09/2005 - 30/06/2009 Bachelor of Applied Mathematics, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

Competenze personali/

Personal Skills

Lingua madre / Mother tongue Ukrainian

Altre lingue / Other languages* Livello / Level *

English C1 - Avanzato

Italian A1 - Principiante

Russian C2 - Fluente

*Autovalutazione / Self-assessment: [Quadro Comune Europeo di Riferimento delle Lingue / Common European Framework of Reference for Languages](#)

Altre competenze/

Other Skills

Altre competenze / Other skills Program languages and Frameworks: Julia, Python, Java, C, C++, ?#, Basic, Assembler, Pascal, Lisp, SQL, CQL, PL/SQL, T-SQL, OS-Android, WinAPI, ASP.NET MVC, SignalR, Windsor Container, Redis, Bootstrap, AngularJS, Spring MVC, Hibernate, Google Web Toolkit, Pyramid, Flask, Django, NumPy, SciPy, Pandas, matplotlib, scikit-learn, TensorFlow, Scrapy, Seaborn, Bokeh Database Management: MS SQL, MySQL, Oracle, Firebird, MongoDB, MariaDB, Postgres, Firebird, Cassandra (stored procedures, functions, triggers, etc) Oracle Data Integrator Integrated Development Environment: NetBeans IDE, Eclipse IDE, IntelliJ IDEA, MS Visual Studio, Delphi7, PyCharm, IPython, Jupyter Notebook, QT Technology stack: ODBC, JDBC, .NET, VPN, Microsoft Virtual PC, VMWare, VirtualBox, Azure, AWS Methodology: Scrum, Kanban, SADT, UML

Patente di guida / Driving licence

Ulteriori informazioni/

Additional Information

Sito personale / Personal web pages <https://www.scopus.com/authid/detail.uri?authorId=36495660500>

Ulteriori Informazioni / Additional Info <https://orcid.org/0000-0003-1216-9201> <https://publons.com/researcher/3253208/igor-tereshchenko/>
<https://github.com/igortereshchenko> <https://scholar.google.com/citations?user=JJKlCg4AAAAJ&hl=en>