

VITALII ZHUKOV, PHD

(346) 332-8210
zhuko.v.italy@gmail.com
vzhukov.github.io

EXPERIENCE

DATA SCIENCE – 5 YEARS, SOFTWARE ENGINEERING – 6 YEARS, PROJECT MANAGEMENT – 2 YEARS

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|---|-------------------------------------|----------------|
| Researcher | Computational Physiology Laboratory | 2019 - Present |
| <ul style="list-style-type: none">• Led 3 research projects, examining laws underlying human behavior and achievement in highly competitive environments resulting in journal manuscripts and conference presentations.• Designed novel analytical methods and applied inferential tools and fine-tuned large language models for hypothesis testing, classification, and forecasting.• Mentored 2 undergraduate students, resulting in their recognition with awards for outstanding research achievements.• Instructed 4 classes: Statistical Methods in Research, Ubiquitous Computing, Data Structures and Algorithms, Introduction to Programming for more than 2000 students in Computer Science department.• Developed a web-based system to collect, analyze, and visualize user surveys and performance data, optimizing course complexity and flow (4 semesters data, ~500 weekly surveys). | | |
| Project Manager | Luxoft / Deutsche Bank | 2017 - 2018 |
| <ul style="list-style-type: none">• Managed 3 teams (53 FTE) of engineers and data scientists, ensuring delivery of projects in the security domain.• Led the execution of two Proof of Concept initiatives for new products (user studies, concept/usability testing).• Collaborated with various business and product teams to prioritize hypotheses and research questions in strategic planning. Participated in design evaluation. | | |
| Head of Automation | General Satellite | 2010 - 2017 |
| <ul style="list-style-type: none">• Created and led the Automation Department (4 FTE): monitoring, forecasting, and analytical tools development.• Designed and implemented a customer behavior analytics system, improving customer segmentation models (12.5 million users). Strengthened behavior analysis capabilities (customer research), enhancing strategic planning resulting in 8% revenue increase. | | |

EDUCATION

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| Doctor of Philosophy (Ph.D.) | University of Houston |
| <ul style="list-style-type: none">• Computer Science, GPA: 3.87.• President - Computer Science Graduate Students Association (CSGSA). | |
| Master of Science (M.S.) | St. Petersburg Polytechnic University |
| <ul style="list-style-type: none">• Mechanical Engineering. | |

SKILLS

- Python; R; SQL; C++; Bash.
- GCP; CloudConsole; LangChain; VertexAI; DialogflowCX; DataFlow; DataFusion; BigQuery.
- ML; DL; LLM System design; Prompt Design & Engineering; RAG.
- Git; Atlassian Jira/Confluence; Redmine; OSF; Zabbix; ITIL; SDLC; Agile; Scrum.

RESEARCH

- [IN PREPARATION] Zhukov, Tsiamyrtzis, Pavlidis (2024) Modeling of Competitive Human Performance.
- [UNDER REVIEW] Zhukov, Pavlidis, Dukes (2023) Quantitative History of Affectivism.
- [CONFERENCE PAPER] Zhukov et al. (2022) Convergence in Affective Sciences, ISRE 2022, LA CA.
- [CONFERENCE PAPER] Hasan, Tsiamyrtzis, Zhukov, Manser, Wunderlich, Pavlidis (2023) ACM CHI 2024.
- [PUBLISHED] Zhukova, Li, Zhukov, Grigorenko (2023) Children, 10(8), p.1367.