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VITALII ZHUKOV, PHD

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EMPLOYMENT

Graduate Teaching Assistant

University of Houston

2019 - 2023

- <u>Statistical methods in research</u> (R, Python) Designed lab curriculum, instructed hands-on data analysis.
- Ubiquitous computing (Swift) Implemented a system of interactive students' feedback and performance.
- <u>Data Structures and Algorithms</u>, <u>Introduction to Programming</u> (C++) Developed practical class materials.

Research Assistant

Computational Physiology Lab

2019 - 2023

- Focus: Human performance in complex systems emphasizing the application of Large Language Model (LLM)
- Led 3 research projects, examining laws underlying achievement in highly competitive environments.
- Architected and produced the probabilistic human performance estimation method and QC technique.
- Utilized fine-tuned LLMs to create and integrate solutions for classification and forecasting.
- Stack: R (tidyverse, dplyr, car, lme4, caret, MASS, shiny, ggplot2, plotly), Python (NumPy, Pandas, SciPy, PyTorch, Keras, TensorFlow), MySQL, PostgreSQL, GPT-3.5, Llama2, ALBERT.

Project Manager Luxoft, DXC 2018

- Spearheaded software development in the Deutsche Bank Security and Authorization Department.
- Successfully managed the delivery of three major releases and led the execution of two Proof of Concept (POC) initiatives for new products.
- Communicated with, coached, and coordinated international employees (53 FTE in 4 countries).
- Tools & Frameworks: Jira, Confluence, MS Office, Agile, Scrum, SDLC, PRINCE2.

Software Engineer

General Satellite

2010 - 2017

- Created and led Automation Department (4 FTE). Focus: CI/CD and Monitoring tools development.
- Developed four software/hardware products for Digital Video Broadcasting infrastructure monitoring.
- Stack: Python3, Celery, Tornado, Redis, Postgres, Bash, Debian GNU/Linux.

EDUCATION

Doctor of Philosophy (Ph.D.)	University of Houston	2023
 Computer Science, CGPA: 3.9 		
Masters (M.S.)	St. Petersburg Polytechnic University	2012
 Mechanical Engineering 		
Professional Training	ITMO, St. Petersburg Polytechnic University	2014 - 2015

• Database Development and Administration, Python Software Development

LEADERSHIP ACTIVITIES AND AWARDS

- Successfully completed: Google's Foobar challenge, 2022
- President of the Computer Science Graduate Students Association: University of Houston, 2019 2021
- Employee of the year: General Satellite, 2016

LANGUAGES, TECHNOLOGIES, AND FRAMEWORKS

- Python; R; SQL; C++; Swift; Bash; PowerShell.
- Git; Atlassian Jira/Confluence; Redmine; OSF; Zabbix; Wireshark; Linux; Debian; MS Server.
- MlOps; LLMOps; LLM System design; DevOps; ITIL; SDLC; Agile; Scrum.

PUBLICATIONS

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