Vsevolod Suschevskiy

Virtual Labs

Machine Learning **NLP** xΑI

Design of Experiments

Complex design

Analysis

Social Network Mechanism-based explanations

vvseva@u.northwestern.edu |

vvseva.quarto.pub

Evanston, IL, USA

Research and Professional Experience

SONIC lab at Northwestern University

June 2022 - present

Analytical Sociology

Graduate Research Assistant

Evanston, IL

- Advisor: Noshir Contractor
- Data-Driven research of Human-Al Communication in teams, using multilayer-ERGMs (paper in progress)
- Designing Transition from Wizard of OZ style experiment to a digital experiment powered by LLMs and deployed on Empirica.ly platform (MVP ready)
- Interactive survey to study unfriending at Facebook (pre-pilot)
- Grant proposal writing
- Undergraduate interns supervision

ATLAS lab at Northwestern University

Mar. - Aug. 2023

Evanston, IL

- Graduate Research Assistant
- Designing virtual lab experiment for studying collaboration in Human-Al teams

Northwestern University

- Advisor: Leslie DeChurch

Mar. 2023 - Aug. 2024

Graduate Teaching Assistant

Evanston, IL

- Spring 2023, Spring 2024; MSC 492: Leading & Leveraging Networks; 50+ graduate students; Prof.: Noshir Contractor
- Fall 2023 COMP SCI 330: Human-Computer Interaction; 200+ undergraduate students; lo-fi paper prototyping; Figma; Prof.: Matthew Kay
- Spring 2024, COMP SCI 341: Social Network Analysis; 75+ STEM and non-STEM students; Prof.: Noshir Contractor

Core Analytics at VK

July - Sep. 2021

Research Internship

St. Petersburg, Russia

- Population Scale Social Network Analysis: Validating Robin Dunbar's concept of social circles on dyadic interactions, examining dynamics of social circles. Privacy-focused design recommendations.
- VK Teach Talk video (in Russian)

SLATE Center at University of Bergen

Jan. 2020 - Jun. 2021

Research Assistant

Bergen, Norway

- Supervisor: Dr. Mohammad Khalil
- Created a **course recommendation system** for exchange students, using Shiny, Elasticsearch, and TensorFlow.
- 10+ Think aloud interviews, 50+ user test participants

HSE University

Sept. 2020 - Jun. 2022

Lecturer

St.Petersburg, Russia

- Data Science Minor: CS0 and CS1 for non-STEM majors; tidyverse, tidymodels, shiny; offline to online transition
- MSc UX Analytics and Information System Design: Research Seminar; Into to experiments in HCI
- MSc Data Analytics for Politics and Society: 15+ graduate students; sklearn, pandas, crowdsourcing

European University At St. Petersburg

Mar. - Jun. 2022

Lecturer

St.Petersburg, Russia

 Data Visualization: MSc Applied Data Analysis (PANDAN); Grammar of Graphics, ggplot2, tableau; 20+ professional and graduate students

SocComp research group at HSE University

2017-2018; 2019-2020

Junior member

St.Petersburg, Russia

- Supervisor: Prof. Alena Suvorova
- Tutorials for junior students on Bayesian network analysis and xAI, and model interpretation for Data Science minor
- Supervisor: Ilya Musabirov
- Social Network Analysis of eSports transfers in Dota 2 with ERGMs

HSE University

2017 Sep. - Jun. 2020

Teaching Assistant

St.Petersburg, Russia

- Data Science minor: tutorial, grading
- Theory Construction and Model Building: Undergraduate elective for Sociology Major students; Integration of theoretical frameworks, e.g. Desire-belief-opportunity, Theory of Planned behavior, Bounded rationality with Computational representation, e.g. production rules, probabilistic models; NetLogo.

Education

Northwestern University

June 2022 - present

PhD Student in Technology and Social Behavior

Evanston, IL, USA

- Advisor: Noshir Contractor
- Dissertation TBA

HSE University

Sept. 2020 - Jun. 2022

MSc Information Systems and Human-Computer Interaction

St.Petersburg, Russia

- Advisor: Ilya Musabirov, Alena Suvorova
- Dissertation: "Experiments in Designing Personalized Motivational Systems" is a set of virtual labs designed to test the idea of self-nudging in crowdsource workers settings

University of Bergen

Aug. – Dec. 2019

Exchange term

Bergen, Norway

 Research Topics in Technology Enhanced Learning; Knowledge Representation and Reasoning

HSE University

Jan. 2017 - Jun. 2020

BA Sociology and Social Informatics

St.Petersburg, Russia

- Advisor: Ilya Musabirov

 Dissertation: "Computational Modelling Frameworks in Sociology: Scientometric Analysis" is a sociology of science work on how researchers transfer their epistemic beliefs from the original discipline into applied theoretical frameworks and computational representations

Immanuel Kant Baltic Federal University

Sociology

Sep. – Dec. 2016 Kaliningrad, Russia

- State-funded place, but transferred after the first semester

Volunteer Experience

HELPDESK.MEDIA Sept. 2022

- Provided consultations on how to safely escape areas affected by war.

Women Data Leaders in Russia

Sept. 2018 - Jun. 2020

 Organized poster session; Interviewed Jana Diesner and Milena Tsvetkova; Edited video for youtube channel

Skills

Data analysis: R (**tidyverse**, igraph, rvest, bnlearn, ERGM); Python (pandas, pyspark, networkx)

Machine Learning: R (**tidymodels**, rpart, LDA, STM); Python (Tensorflow, spacy, gensim, huggingface, LLMs)

Visualization: R (ggplot2, visNetwork, plotly, shinydashboard), Tableau; Python (Seaborn, Plotly)

Interactive web apps: R (Shiny), JavaScript (empirica.ly)

Data Bases: SQL (ClickHouse, MongoDB), noSQL (Elasticsearch)

All other random stuff: Linux, AWS, git, NetLogo, Prolog, Open Broadcast Software, Adobe

Premiere Pro, LATEX

Awards

Toloka Research Grant (Yandex LLC): Supported my MSc thesis experimental research on behavioural nudges and boosts. Feb 2022.

Peter and Adrienne Barris Outstanding Teaching Assistant: Northwestern Computer Science honors and recognizes students who demonstrate excellence in computer science mentoring and teaching. Spring 2024 Social Network Analysis class. (COMP-SCI 341)

Languages

Russian : Native English : C1/C2 French : beginner

- **Suschevskiy, Vsevolod** & Khalil, M. (2021). Creating a Course Recommendation System for Exchange Students. *Companion Proceedings 11th International Conference on Learning Analytics & Knowledge (LAK21)*. https://www.researchgate.net/publication/350874550_Creating_a_Course_Recommendation_System_for_Exchange_Students
- Musabirov, I., & **Suschevskiy, Vsevolod**. (2020a). Teaching Undergraduate Sociologists Modeling and Computational Thinking. *Proceedings of the 51st ACM Technical Symposium on Computer Science Education*, 1368. https://doi.org/10.1145/3328778.3372687
- Marchenko, E., & **Suschevskiy, Vsevolod**. (2018). Analysis of Players Transfers in Esports. The Case of Dota 2. *Proceedings of the 22nd International Academic Mindtrek Conference*, 255–257. https://doi.org/10.1145/3275116.3275151
- Suschevskiy, Vsevolod & Marchenko, E. (2018). Network Analysis of Players Transfers in eSports: The Case of Dota 2. In D. A. Alexandrov, A. V. Boukhanovsky, A. V. Chugunov, Y. Kabanov, & O. Koltsova (Eds.), *Digital Transformation and Global Society* (pp. 468–473). Springer International Publishing. https://doi.org/10.1007/978-3-030-02843-5_38

Conference presentations

- **Suschevskiy, Vsevolod**, Javalagi, A., Sean, F., Hoshi, F., Cueva, X. L., Garcia, J., DeChurch, L., & Contractor, N. (2023, November). Approaches to Investigating Human-AI Teams: Transition from the Wizard of Oz to LLM-Powered Agents [<u>Conference Presentation</u> at 2023 Conference on Digital Experimentation @ MIT (CODE@MIT)].
- Suschevskiy, Vsevolod, Larson, L., Malte, J., DeChurch, L., & Contractor, N. (2023, June). Exploring the Structure of Human-Al Interaction Networks: The Impact of Al Teammate Modes on Collaboration and Performance [Poster Presentation at The International Conference for Computational Social Science (IC2S2)].
- Suschevskiy, Vsevolod & Musabirov, I. (2022, October). Experiments in Designing Personalized Motivational Systems [Poster Presentation at Lambert Conference on the Future of Human-Computer Interaction + Design, Evanston]. https://bit.ly/HCI_D_EXPERIMENT
- Musabirov, I., & **Suschevskiy, Vsevolod**. (2020b, February). Teaching Undergraduate Sociologists Modeling and Computational Thinking [Portland, Oregon, USA, Poster].
- **Suschevskiy, Vsevolod** & Musabirov, I. (2020, July). Agent-Based Modeling of Transfers Between Teams in Esports [Virtual poster, http://www.pfeffer.at/sunbelt/talks/1092.html].
- **Suschevskiy, Vsevolod**, Musabirov, I., Buligin, D., & Marchenko, E. (2019, July). Network Analysis of Global Transfers in Dota 2 [*Amsterdam, Netherlands, Poster*, https://2019.ic2s2.org/posters/].