Vsevolod Suschevskiy Analytical Sociology

Virtual Labs

Machine Learning NLP xAI

Design of Experiments

Deployment

Analysis

Social Network Mechanism-based explanations

vvseva@u.northwestern.edu

vvseva.netlify.app | Evanston, IL

Research and Professional Experience

SONIC lab at Northwestern University

June 2022 - present

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

Graduate Research Assistant

Evanston, IL

- Advisor: Leslie DeChurch
- Designing virtual lab experiment for studying collaboration in Human-AI teams

Northwestern University

Mar. - Dec. 2023

Graduate Teaching Assistant

Evanston, IL

- COMP SCI 330: Human-Computer Interaction; Prof.: Matthew Kay
- 200+ undergraduate students; lo-fi paper prototyping; Figma
- MSC 492: Leading & Leveraging Networks; Prof.: Noshir Contractor
- 50+ graduate students;

Core Analytics at VK

July - Sep. 2021

Research Internship

St. Petersburg, Russia

- Population Scale Social Network Analysis: Validating Robin Dunbar's concepts 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 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 St.Petersburg, Russia

Teaching Assistant

- 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

- 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 the science 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.

Languages

Russian : Native English : C1/C2 French : beginner

Publications

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**. (2020). 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, V. (2020, February). Teaching Undergraduate Sociologists Modeling and Computational Thinking [Portland, Oregon, USA, Poster].
- Suschevskiy, V., & Musabirov, I. (2020, July). Agent-Based Modeling of Transfers Between Teams in Esports [Virtual poster, http://www.pfeffer.at/sunbelt/talks/1092.html].
- Suschevskiy, V., Musabirov, I., Buligin, D., & Marchenko, E. (2019, July). Network Analysis of Global Transfers in Dota 2 [*Amsterdam, Netherlands,* Poster, https://2019.ic2s2.org/posters/].