Silviu Matu

Date of birth: 01/08/1986 | **Nationality:** Romanian | **Gender:** Male | **Phone number:**

(+40) 766897012 (Mobile) | **Email address:** silviu.matu@ubbcluj.ro |

Address: No. 37 Republicii St., AVALON Building, 400015, Cluj-Napoca, Romania (Work)

WORK EXPERIENCE

01/10/2023 – CURRENT Cluj-Napoca, Romania
RESEARCHER BABEȘ-BOLYAI UNIVERSITY

I work as a researcher in 4 projects. One of the projects is related to predicting students's mental health based on data coming from mobile devices, using machine learning algorithms (ML). My main responsibility in this project is developing the predictive models using Scikit and TensorFlow libraries (Python). Two of the projects are related to investigating the psychological mechanism of mental disorders using ecological momentary assessment, and further test the efficacy of online interventions developed based on that knowledge. My role in these project implies data processing, analysis and manuscript writing. I mainly work with R (for hierarchical linear models), Mplus (for dynamic structural equation modeling), and Python for ML tasks. I am also exploring the use of large language models (LLMs) for affect classification. The fourth project is related to delivering a psychological intervention for military personnel and testing its efficacy. My responsibilities implied developing the curriculum of the intervention, delivering it and analyse the data.

31/01/2017 – 30/09/2023 Cluj-Napoca, Romania
VICE-DEAN FOR RESEARCH ACTIVITIES FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCES, BABEȘ-BOLYAI UNIVERSITY

Main responsibilities:
- Monitoring and reporting research activities;
- Offering administrative support to faculty members;
- Developing policies to support research activities.

30/09/2014 – 30/09/2023 Cluj-Napoca, Romania
SENIOR ASSISTANT PROFESSOR DEPARTMENT OF CLINICAL PSYCHOLOGY AND PSYCHOTHERAPY, BABEȘ-BOLYAI UNIVERSITY

- Teaching graduate level courses in:
  - Research methods
  - Statistics
  - Cognitive sciences
    - I had consistent positive feedback from my students over my entire teaching career.
- Coordinating master's dissertations and bachelor's theses.
  - I coordinated an average of 15+ theses and dissertations every year.
- Conducting scientific research and publishing scientific papers.
  - See my Google Scholar profile in the link bellow.
- Delivering trainings, workshops, and lecture related to psychology and well being.

Link https://scholar.google.ro/citations?user=gzoZSMUAAAAJ&hl=en

31/10/2018 – 30/09/2022 Cluj-Napoca, Romania
POST-DOCTORAL RESEARCHER BABEȘ-BOLYAI UNIVERSITY

Team member in the project „Understanding and modelling time-space patterns of psychology-related inequalities and polarization", project no. PN-III-P4-ID-PCCF-2016-0084, funded by Romanian National Authority for Scientific Research and Innovation, CNDS-UEFISCDI, PI Daniel David, Ph.D.

Main responsabilities:
- Supervise data collection;

- Data analysis;
- Manuscript writing.

31/05/2014 – 29/09/2018 Cluj-Napoca, Romania
RESEARCHER BABEȘ-BOLYAI UNIVERSITY

Team member in the project „Development of autonomous robot-assisted therapy for children with autism spectrum disorders (DREAM)", grant agreement no. 611391, funded by the European Commission, 7th Framework Programme, PI Daniel David, Ph.D.

Main responsabilities:
- Supervise data collection;
- Data analysis;
- Manuscript writing.

31/07/2017 – 30/01/2018 Cluj-Napoca, Romania
PROJECT DIRECTOR BABEȘ-BOLYAI UNIVERSITY

Coordinator of the project "Psychological and cultural mechanism that affect life insurance penetration", awarded by the STAR-UBB Institute, Babeș-Bolyai, as an Advanced Fellowship.

30/09/2014 – 30/12/2017
RESEARCHER BABEȘ-BOLYAI UNIVERSITY

Team member in the project Mobile System for Rehabilitative Vocal Assistance of Surgical Aphonia (SWARA), funded by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), Romania, project no. PN-II-PT-PCCA-2013-4-1660, PI Daniel David, Ph.D.

Main responsibilities:
- Data collection;
- Data analysis;
- Manuscript writing.

31/03/2015 – 30/03/2016 Cluj-Napoca, Romania
PROJECT DIRECTOR BABEȘ-BOLYAI UNIVERSITY

Director of the project "Cognitive and behavioral regulation: a new paradigm for translational research in clinical psychology", awarded by the Babeș-Bolyai University through the Young Researchers program.

31/08/2013 – 30/07/2014 Cluj-Napoca, Romania
RESEARCH ASSISTANT BABEȘ-BOLYAI UNIVERSITY

Tteam member in the project "The efficacy of a web-based platform in the treatment of child anxiety (iDARE)", funded by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), Romania, project no. PN-II-PT-PCCA-2011-3.1-1500, PI Anca Dobrean, Ph.D.

Main responsibilities:
- Experimental set-up preparation.

31/12/2011 – 29/06/2013 Cluj-Napoca, Romania
RESEARCH ASSISTANT BABEȘ-BOLYAI UNIVERSITY

Team member in the project "A Computational Distributed System to Support the Treatment of Patients with Major Depressive Disorder (Help4Mood)", funded by the European Commision, 7th Framework Programme, project no. ICT-248765, PI Aurora Szentagotai, Ph.D.

Main responsibilities:
- Data collection;
- Data processing.

30/11/2011 – 30/03/2013 Cluj-Napoca, Romania
RESEARCH ASSISTANT BABEȘ-BOLYAI UNIVERSITY

Team member in the project "Exploring Robot Assisted Therapy for Children with ASD", funded by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), Romania, project no. PN-II-ID-PCE-2011-3-0484, PI Bram Vanderborght, Ph.D.

Main responsibilities:
  • Experimental set-up preparation.

EDUCATION AND TRAINING

01/10/2023 – CURRENT Cluj-Napoca, Romania
MSC IN ARTIFICIAL INTELLIGENCE Faculty of Mathemathics and Computer Sciences, Babeș-Bolyai University

Thesis Focused on using Large Language Models to conduct systematic literature reviews.

01/10/2022 – CURRENT Bucharest, Romania
BSC IN COMPUTER SCIENCE Faculty of Mathemathics and Computer Sciences, Univeristy of Bucharest

Thesis Focused on ML applied to panel data/econometrics.

30/09/2014 – 29/09/2015 Cluj-Napoca, Romania
POST-DOCTORAL FELLOW The International Institute for the Advanced Studies of Psychotherapy and Applied Mental Health

30/09/2010 – 12/12/2013 Cluj-Napoca, Romania
PH.D. DEGREE IN PSYCHOLOGY Evidence-Based Assessment and Psychological Interventions Doctoral School, Babeș-Bolyai University

30/09/2008 – 20/07/2010 Cluj-Napoca, Romania
M.A. IN CLINICAL PSYCHOLOGY, PSYCHOLOGICAL COUNSELING AND PSYCHOTHERAPY Faculty of Psychology and Educational Sciences, Babeș-Bolyai University

30/09/2005 – 24/07/2008 Bucharest, Romania
B.A. IN PSYCHOLOGY Faculty of Psychology and Educational Sciences, University of Bucharest

LANGUAGE SKILLS

Mother tongue(s):   **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1
FRENCH	B1	B2	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

R language statistical programming │ Python (including common AI/ML libraries) │ Java │ Oracle SQL

International Publications

Stefan, S., Stroian, P., Fodor, L., Matu, S., Nechita, D., Boldea, I., ... & Mustățea, M. (2023). An online contextual schema therapy workshop for social anxiety symptoms–a randomized controlled trial. Journal of Contextual Behavioral Science, 29, 67-75.

Bartucz, M. B., Matu, S. A., & David, D. O. (2022). The protective effect of culture on depression during covid-19 pandemic: a Romanian national study. Journal of Cross-Cultural Psychology, 53(9), 1166-1186.

Bartucz, M. B., David, D. O., & Matu, S. A. (2022). Cognitive vulnerabilities and depression: A culture-moderated meta-analysis. Cognitive Therapy and Research, 46(3), 502-516.

David, D. O., Costescu, C. A., Matu, S., Szentagotai, A., & Dobrean, A. (2020). Effects of a robot-enhanced intervention for children with ASD on teaching turn-taking skills. Journal of Educational Computing Research, 58(1), 29-62.

Billing, E., Belpaeme, T., Cai, H., Cao, H. L., Ciocan, A., Costescu, C., ...Matu, S., ... & Ziemke, T. (2020). The DREAM Dataset: Supporting a data-driven study of autism spectrum disorder and robot enhanced therapy. PloS one, 15(8), e0236939.

David, O. A., Cardoș, R. A., & Matu, S. (2019). Changes in irrational beliefs are responsible for the efficacy of the REThink therapeutic game in preventing emotional disorders in children and adolescents: mechanisms of change analysis of a randomized clinical trial. European child & adolescent psychiatry, 28(3), 307-318.

David, O. A., Cardoș, R. A., & Matu, S. (2019). Is REThink therapeutic game effective in preventing emotional disorders in children and adolescents? Outcomes of a randomized clinical trial. European child & adolescent psychiatry, 28(1), 111-122.

David, D. O., Costescu, C. A., Matu, S., Szentagotai, A., & Dobrean, A. (2019). Effects of a Robot-Enhanced Intervention for Children With ASD on Teaching Turn-Taking Skills. Journal of Educational Computing Research, 0735633119830344.

David, D. O., Costescu, C. A., Matu, S., Szentagotai, A., & Dobrean, A. (2018). Developing Joint Attention for Children with Autism in Robot-Enhanced Therapy. International Journal of Social Robotics, 1-11.

Cao, H. L., Esteban, P., Bartlett, M., Baxter, P. E., Belpaeme, T., Billing, E., ... & David, D. (2019). Robot-enhanced therapy: development and validation of a supervised autonomous robotic system for autism spectrum disorders therapy. IEEE Robotics and Automation Magazine.

David, D. O., Costescu, C. A., Matu, S., Szentagotai, A., & Dobrean, A. (2018). Developing joint attention for children with autism in robot-enhanced therapy. International Journal of Social Robotics, 10(5), 595-605.

David, D., Cotet, C., Matu, S., Mogoase, C., & Stefan, S. (2018). 50 years of rational-emotive and cognitive-behavioral therapy: A systematic review and meta-analysis. Journal of clinical psychology, 74(3), 304-318.

David, D., Matu, S. A., David, O. A., & Terracciano, A. (2017). The Role of Cognitive Discrepancy Between Perception of National Character and Personality in the Functioning and Adaptation of 46 Countries: An Exploratory Study. Cross-Cultural Research, 51(4), 412-430.

Cândea, D. M., Cotet, C. D., & Matu, S. A. (2016). Do Psychologists Offer Coaching Services? Preliminary Results from a Survey on CBT Practitioners. *Journal of Evidence-Based Psychotherapies*, *16*(1), 57.

David, D., Matu, S., Mogoaşe, C., & Voinescu, B. (2016). Integrating Cognitive Processing, Brain Activity, Molecules and Genes to Advance Evidence-Based Psychological Treatment for Depression and Anxiety: From Cognitive Neurogenetics to CBT-Based Neurogenetics. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *34*(3), 149-168.

Neguţ, A., Matu, S. A., Sava, F. A., & David, D. (2016). Virtual reality measures in neuropsychological assessment: a meta-analytic review. *The Clinical Neuropsychologist*, *30*(2), 165-184.

Neguţ, A., Matu, S. A., Sava, F. A., & David, D. (2016). Task difficulty of virtual reality-based assessment tools compared to classical paper-and-pencil or computerized measures: A meta-analytic approach. *Computers in Human Behavior, 54*, 414-424.

Burton, C., Szentagotai Tatar, A., McKinstry, B., Matheson, C., Matu, S., Moldovan, R., ... & Serrano Blanco, A. (2016). Pilot randomised controlled trial of Help4Mood, an embodied virtual agent-based system to support treatment of depression. Journal of telemedicine and telecare, 22(6), 348-355.

Stanculete, M. F., Matu, S., Pojoga, C., & Dumitrascu, D. L. (2015). Coping Strategies and Irrational Beliefs as Mediators of the Health-Related Quality of Life Impairments in Irritable Bowel Syndrome. *Journal of gastrointestinal and liver diseases, 24*(2), 159-164.

Dobrean, A., & Matu, S. (2015). Internationally Active, Visible, High Impact, and Eminent Romanian Psychologists. a Quantitative Analysis. *Journal of Evidence-Based Psychotherapies, 15*(1), 135.

David, O. A., Matu, S. A., Pintea, S., Cotet, C. D., & Nagy, D. (2014). Cognitive-Behavioral Processes Based on Using the ABC Analysis by Trainees' for Their Personal Development. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 32(3) 1-18. doi: 10.1007/s10942-014-0189-0

David, D., Matu, S. A .*, & David, O. A. (2014). Robot-Based Psychotherapy: Concepts Development, State of the Art, and New Directions. *International Journal of Cognitive Therapy, 7*(2), 192-210. doi: 10.1521/ijct.2014.7.2.192

David, O., & Matu, S. A. (2013). How to tell if managers are good coaches and how to help them improve during adversity? The managerial coaching assessment system and the rational managerial coaching program. *Journal of Cognitive and Behavioral Psychotherapies, 13*(2a),497-522.

David, D., Matu, S. A.*, & David, O. A. (2013). New Directions in Virtual Reality-Based Therapy for Anxiety Disorders. *International Journal of Cognitive Therapy, 6*(2), 114-137. doi: 10.1521/ijct.2013.6.2.114

Cristea, I. A., Matu, S.*, Szentagotai Tatar, A., & David, D. (2013). The other side of rumination: reflective pondering as a strategy for regulating emotions in social situations. *Anxiety Stress Coping, 26*(5), 584-594. doi: 10.1080/10615806.2012.725469.