# Curriculum Vitae

#### Personal Information:

- Name and surname: Gorjan Popovski

- Date of birth: 29.07.1997

- Nationality: Republic of North Macedonia

#### Contact and websites:

- Email: gorjan.popovski@gmail.com

- Portfolio: <a href="https://gorjanp.github.io/">https://gorjanp.github.io/</a>

- ResearchGate: https://www.researchgate.net/profile/Gorjan Popovski

- LinkedIn: https://www.linkedin.com/in/gopop/

- GitHub: <a href="https://github.com/GorjanP">https://github.com/GorjanP</a>

- Google Scholar: <a href="https://scholar.google.com/citations?user=3IMe18kAAAAJ&hl=en">https://scholar.google.com/citations?user=3IMe18kAAAAJ&hl=en</a>

### Education:

#### - Master of Science

- Title: Master of Information and Communication Technologies. (In Slovenian: magister informacijskih in komunikacijskih tehnologij)
- Jožef Stefan International Postgraduate School, Ljubljana, Republic of Slovenia
- Time period: 10/2019 09/2020 (2 years' curriculum in 1 calendar year)
- Final Grade Average: 9.89/10

#### - Bachelor of Science

- Title: Bachelor of Science (Information Technology); sub-degree: Computer Science and Engineering.
- Faculty of Computer Science and Engineering (FCSE) "Ss. Cyril and Methodius" University in Skopje, Republic of North Macedonia
- Time period: 09/2016 06/2019
- Final Grade Average: 9.63/10

### Languages:

- Macedonian native language
- English C2 (full proficiency)
  - Acquired international "Certificate of Proficiency in English (CPE)"; passed exam at language level C2 with grade A, held by Cambridge in 2016 (License 0051815940)
- Slovenian A2/B1

## Fields of interest:

 Natural Language Processing, Machine Learning, Deep Learning, Representation Learning, Knowledge Engineering, Data Science, Data Analytics, Data Visualization, Software Development, Algorithms and Complexity, Graph Theory, Optimization

## Work experience:

- 01.10.2021 ongoing: [part-time] Machine Learning Lecturer (part-time) at the CreativeHub Data Science Academy.
  - Teaching three courses (SQL, Python Basics, and Python Advanced) in the domain of Data Science.
- 06.04.2021 ongoing: Data Scientist at Enetra.
  - Part of the core Data Science Team, work related to energy trading. Projects include:
    - Designing data pipelines (scraping, cleaning, processing)
    - Developing ROI simulations
    - Developing trading strategies,
    - Timeseries forecasting,
    - Modeling energy systems,
    - Various predictive tasks in the domain,

- Designing and implementing ETL pipelines.
- 06.04.2021 ongoing: Data Scientist at Fareboom.
  - Part of the core Data Science Team, with work related to:
    - Data-driven bot attack detection and prevention
    - Optimizing traffic filters pertaining to a KPI metric (conversion rate, clickthrough rate, etc.)
    - Optimizing cost of third-party paid services without compromising on provided service
- 01.11.2021 ongoing: [part-time] Freelance work on Upwork
  - Projects related to NLP:
    - Automatic agent-customer communication violation detection.
    - News aggregator.
- 01.04.2021 ongoing: Software Engineer at Popsoft dooel Bitola.
  - Work pertaining automatic notification services and alarms via various communication channels (email, SMS, etc.)
- 01.06.2021 01.09.2021: Consulting Machine Learning Engineer at Nanos.ai
  - AI-driven cookie-less marketing.
- 01.04.2021 01.05.2021: Consulting Machine Learning Engineer at CloudAEye.
  - Building MVP for AI-driven cloud fault detection and resolution.
- 01.10.2020 19.03.2021: Young Researcher at the Jožef Stefan Institute, department of Computer Systems (E7),
  Ljubljana, Slovenia
  - Research in the field of Natural Language Processing, Representation Learning, Knowledge Engineering, Optimization, etc.
- 22.06.2020 09.09.2020: Research summer internship at Data and Science Lab (dlab) School of Computer and Communication Sciences at EPFL in Lausanne, Switzerland. (Held remotely).
  - Building Python package for <u>Google Trends Anchor Bank</u>, further defining and developing the methodology.
- 10.09.2019 30.09.2020: Research Assistant at the Jožef Stefan Institute, department of Computer Systems (E7),
  Ljubljana, Slovenia
  - Research in the field of Natural Language Processing, Representation Learning, Knowledge Engineering, Optimization, etc.
- 18.02.2019 22.03.2019: Visiting researcher at the Jožef Stefan Institute, department of Computer Systems (E7), Ljubljana, Slovenia
  - Research in the field of Natural Language Processing.
- 20.07.2018 20.09.2018: Visiting researcher at the Jožef Stefan Institute, department of Computer Systems (E7), Ljubljana, Slovenia
  - Research in the field of Natural Language Processing.
- 15.03.2018 15.06.2018: Back-End Development intern at doXteam, Skopje, Republic of Macedoni
- 22.09.2017 22.09.2018: Part-time educator of advanced topics in Data Structures and Algorithms for Competitive Programming at Semos Education, Skopje, Republic of Macedonia.
  - Preparing middle grade and high school students for national and international competitive programming olympiads

### Programming languages (in descending order of proficiency):

- Python (4+ years' continuous experience), C++ (9+ years' intermittent experience), R (3 years' experience), C, C#, Java, Clojure, JavaScript/TypeScript, Octave/MATLAB, Rust

# Frameworks, technologies and skills (no ordering):

- Python: Trax, Tensorflow (1.x and 2.x), Pandas, NumPy, NLTK, coreNLP, openNLP, SciPy, scikit-learn, huggingface, Numba, Keras. PyTorch, Flask, seaborn, matplotpib, networkx, Jupyter, Dash/Plotly, PyQT,
- R: ggplot2, dplyr, tidyr, caret, coreNLP,
- JavaScript: node.js
- Databases: MongoDB, Redis, SQL
- Other: Docker, Office suites, Tableau

## Awards and Accomplishments

- Awards from competitions in informatics (algorithms) organized by the Computer Society of Macedonia (CSM) for middle and high school students:
  - National competitions:
    - First award: 2015, 2012
    - Second award: 2016, 2014, 2013
    - Third award: 2011
  - Macedonian Olympiad in Informatics (MOI)
    - Bronze medal at MOI: 2016, 2014
  - Bronze medal at the Junior Balkan Olympiad in Informatics (JBOI) in 2012.
- IEEEXtreme competitions:
  - IEEEXtreme 12.0, 2018 ranked 186 out of 2608 teams;
  - IEEEXtreme 11.0, 2017 ranked 181 out of 3350 teams;
  - IEEEXtreme 10.0, 2016 ranked 281 out of 1823 teams.
- In top 0.28% (3 out of 1049) of students that took the course, who achieved the highest grade (10) on the course "Algorithms and Data Structures" held at Faculty of Computer Science and Engineering.
- Two-time (2016-2018) award for excellent academic undergraduate performance throughout the academic year at the Faculty of Computer Science and Engineering.

# Projects and software:

- GoogleTrendsAnchorBank (https://github.com/epfl-dlab/GoogleTrendsAnchorBank)
  - o Principal contributor and maintainer.
- Work on the Horizon2020 project FNS-Cloud (https://www.fns-cloud.eu/)
- Won the team-based hackathon TP-LJ GreenHack in challenge Environment: waste management.

# Scientific publications:

- 25 total published articles in various interdisciplinary journals and conferences (200+ citations)
- $\hbox{-} \quad \text{Full list available at $\underline{\text{https://scholar.google.com/citations?user=3IMe18kAAAAJ\&hl=en}} \\$

## Scholarships:

- Postgraduate Ad Futura Scholarship for study in Slovenia.
- Scholarship awarded to 100 students by the Ministry of Education of The Republic of North Macedonia for excellent undergraduate academic success.

### Organizations and other activities:

- Part of organizing team:
  - Big Food and Nutrition Data Management and Analysis (BFNMDA) workshop at 2020 IEEE
    International Conference on Big Data.
- Reviewer
  - o IEEE Access (<a href="https://ieeeaccess.ieee.org/">https://ieeeaccess.ieee.org/</a>). (past)
  - o Database (<a href="https://academic.oup.com/DATABASE/">https://academic.oup.com/DATABASE/</a>) (past)
  - o Journal of Supercomputing (https://www.springer.com/journal/11227) (past)
  - o IEEE CEC 2021 (https://cec2021.mini.pw.edu.pl/) (past)
- Memberships
  - o Member of IEEE
- Volunteering
  - RecSys 2020 student volunteer

# Academic references on request:

- Tome Eftimov, Ph.D. (Master's studies co-supervisor)
  - Department of Computer Systems, Jožef Stefan Institute, Jamova cesta 39, 1000 Ljubljana, Slovenia

- Email: tome.eftimov@ijs.si
- Assoc. Prof. Barbara Koroušić Seljak, Ph.D. (Master's studies supervisor)
  - Department of Computer Systems, Jožef Stefan Institute, Jamova cesta 39, 1000 Ljubljana, Slovenia
  - Email: <u>barbara.korousic@ijs.si</u>
- Asst. Prof. Robert West, Ph.D (EPFL research internship mentor)
  - Data Science Lab, School of Computer and Communication Sciences at EPFL in Lausanne, Switzerland.
  - Email: <u>robert.west@epfl.ch</u>

# Courses and specializations (passed and acquired certificate):

### Coursera

- [November 2021] "RU330: Redis Security", RedisUniversity, credential ID: 302982a147a54208ab97ccdd01adbb45
- [November 2021] "RU301: Running Redis at Scale", RedisUniversity, credential ID: 3d76b9a89e7e42b880dbe2120c224a5b
- [November 2021] "RU203: Querying, Indexing, and Full-Text Search", RedisUniversity, credential ID: <a href="https://doi.org/10.108/journal.com/db1d3b3d11c64ad6b14a540a28d1e3f2">db1d3b3d11c64ad6b14a540a28d1e3f2</a>
- [November 2021] "RU202: Redis Streams", RedisUniversity, credential ID: 0d31a1af70364f908e7d8d620ce00fd7
- [October 2021] "RU102py: Redis for Python Developers", RedisUniversity, credential ID: 7e7f79a1e0754e92ab873a103d20d81f
- [October 2021] "RU101: Introduction to Redis Data Structures", RedisUniversity, credential ID: c887c50b31f8491886c602705b8e3f74
- [September 2020] "Deep Learning Specialization" (5 courses) held by Andrew Ng, deeplearning.ai, credential ID: SWGELEC7RATL
- [October 2018] "Cryptography I" held by Dan Boneh, Stanford University CAH7UZ476CXH
- [February 2018] "Game Theory II: Advanced Applications", held by Stanford University and The University of British Columbia, credential ID: <a href="mailto:EA2K9QEND85C"><u>EA2K9QEND85C</u></a>
- [January 2018] "Game Theory", held by Stanford University and The University of British Columbia, credential ID: XDP35ZQE48VK
- [January 2017] "Machine Learning, held by Andrew Ng, Stanford University, credential ID: <u>E7FRUWMQHLP2</u>

### Other courses and summer schools:

- "Engineering cryptography software" held by Peter Schwabe in cooperation with FCSE and Digital Security Group, Radboud University, The Netherlands
- "Summer School on Real-World Crypto and Privacy", organized by the Digital Security (DiS) group, Radboud University (The Netherlands), COSIC group, KU Leuven (Belgium), ETH Zurich Information Security and Privacy Center (Switzerland) and Faculty of Electrical Engineering and Computing, University of Zagreb (Croatia). (https://summerschool-croatia.cs.ru.nl/2017/index.shtml)
- "The Art of Game Programming Create Your Own Entertainment" organized by Board of European Students of Technology (BEST), held by the Silesian University of Technology, Gliwice, Poland and lecturers from game development company Artifex Mundi, where a group of 23 students from 18 countries participated.
- "Connect'em All! Internet of Things" organized by Board of European Students of Technology (BEST), held by the Lodz University of Technology, Lodz, Poland, where a group of 18 students from 11 countries participated.

#### Personal hobbies:

- Literature
- Creative writing