Curriculum Vitae

Vit Gabrhel

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Introduction

Hi, I am a data analyst with experience in the field of travel behaviour analysis, travel demand modelling, customer experience, customer satisfaction, and product analysis. I am an independent user of statistical packages (**R, Python, Google Sheets, MS Excel**) and database quering languages/dialects (**PostgreSQL, MySQL, Snowflake, Standard SQL** in **BigQuery**) with experience in areas ranging from the data collection through its **wrangling, description, visualisation** to the advanced linear models (**regression models, PCA, SEM**). Lately, I have gained experience with data **science techniques** (like segmentation or recommendation engine) and **data engineering** areas (ETL, data models, data architecture).

Work Experience

Data Analyst

Meiro, Brno, Czech Republic 08/2020–Present

- Covered domains: *Data Engineering, Data Analysis, Data Science.*
- **ETL pipelines management**, **Design of data models**.
- Integrating **PostgreSQL** and **MySQL** with **R** and **Python**, data wrangling, description, and visualization to advanced statistical techniques and data science techniques (e.g. **recommendation engine** and **customer segmentation**) in **Python** using *VS Code.* Fundamentals of **Spark**.
- Linux desktop (Ubuntu), Bash, Git. Fundamentals of **Docker** and **CD/CI**.

Data Analyst

Kiwi.com, Brno, Czech Republic *04/2019–07/2020*

- Covered domains: *Product, Customer Experience, Customer Support.*
- Reports. Integrating **PostgreSQL, Snowflake**, and **BigQuery** with **R** and **Python**, data wrangling, description, and visualization to advanced statistical techniques (regression models, structural equation modelling) in R. Reporting in Markdown (**R notebooks, Jupyter Notebooks**, oral presentations).
- Dashboards. I'm proficient in working with tools like Looker, GoodData, Google Data Studio, or Retool (Plotly).
- Data engineering. Sense of data models and ETL self-service (Keboola, dbt).
- Linux desktop (Ubuntu), **Bash**, **Git**.
- **Jira**, **Scrum**.

Lecturer

Masaryk University, Brno, Czech Republic *09/2015–Present*

- Demonstrations of analyses and their interpretations, providing oral and written feedback in the following courses:
    - Statistical Data Analysis I.

    ∗ *Correlation, contingency tables, t-test, an introduction to non-parametric tests (e.g. chi-square).*
  – Statistical Data Analysis II.
    ∗ *Multiple linear regression, ANOVA, logistic regression, factor analysis, mixed effect models.*
  – An Introduction to R
    ∗ An introduction to the **R language**, *data cleaning, wrangling, description and visualization, multivariate analyses in the R language.*

Researcher

Transport Research Centre, Brno, Czech Republic *06/2015–03/2019*

- Travel behaviour analyses, coordination of research activities, communication with the lay public as well as the community of experts.
- Investigator in the project Česko v pohybu. Development of the research tool, development and implementation of the probabilistic sampling procedure and algorithms for automated control of the data quality.
- Methodological and analytical supervision of the research project for the Czech Ministry of Transport related to the Public opinion on autonomous vehicles.
- Project management of small project teams, e.g. program section for the conference Dopravní chování v datech.

Education

Psychology (Ph.D.)

Masaryk University, Brno, Czech Republic *09/2015–Present*

- Specialisation in advanced analytical methods – structural equation modelling, multinomial regression.
- Member of the *Disciplinary Committee — Faculty of Social Studies.*

Psychology (Master degree)

Masaryk University, Brno, Czech Republic *2013–2015*

- Specialisation in **frequentist statistics**, introduction to Bayesian statistics.
- Scholarship for excellent performance in research activities given by the Faculty of Social Studies during the academic year 2013/2014.
- Thesis: Student Styles Questionnaire in the Czech context: A pilot study
- Graduated with honours.

Psychology and Sociology (Bachelor degree)

Masaryk University, Brno, Czech Republic *2010–2013*

Specialisation in quantitative methodology and statistical data analysis in IBM SPSS with focus on linear models. Scholarship for best students of Faculty of Social Studies during the academic years 2010/2011 and 2011/2012. Thesis: The relationship between spirituality and autonomy in late adolescence and emerging adulthood. Graduated with honours.

Internships

Danmarks Tekniske Universitet, Management Engineering, Lyngby, Denmark. *08-09/2017*

Corpus Christi College, University of Cambridge, Cambridge, UK. *07-09/2015*

Selected publications

- Gabrhel, V., Ježek, S. (2017). Factor validity and internal consistency of the Expressions of Spirituality Inventory – Revised (ESI-R): The Czech context. International Journal of Transpersonal Studies, 36 (1), 101-109. doi:10.24972/ijts.2017.36.1.101.
- Gabrhel, V. (2019). Feeling like cycling? Psychological factors related to cycling as a mode choice. Transactions on Transport Sciences, 10 (1). doi:10.1007/978-3-319-60441-1_80
- Gabrhel, V., Ježek, S., Havlíčková, D. (2019). Public opinion on connected and automated vehicles: the Czech context. Transactions on Transport Sciences, 10 (2). doi:10.5507/tots.2019.011
- Havlíčková, D., Gabrhel, V., Adamovská, E., Zámečník, P. (2019). The role of gender and age in autonomous mobility: general attitude, awareness and media preference in the context of Czech Republic. Transactions on Transport Sciences, 10 (2). doi:10.5507/tots.2019.013
- Jakopec, A., Gabrhel, V., Keane, L., Kovač, N., Reigbert, K., Andersen, T. L. (2015). Work Engagement and Performance: Does the (Mis)Alignment of Justice Sources Matter? Journal of European Psychology Students, 6 (2), 75–78. doi:10.5334/jeps.cs.
- Kurečková, V., Gabrhel, V., Zámečník, P., et al. (2017) First aid as an important traffic safety factor – evaluation of the experience–based training. European Transport Research Review, 9 (5). doi:10.1007/s12544-016-0218-4/
- Šimeček, M., Gabrhel, V., Tögel, M., & Lazor, M. (2018). Travel behaviour of seniors in Eastern Europe: a comparative study of Brno and Bratislava. European Transport Research Review, 10 (16), 1-8. doi:10.1007/s12544-018-0286-8
- Švarcová, J., Gabrhel, V. (2014). Educational Mobility and Educational Aspirations of High School Students in the Czech Republic. The International Journal of Interdisciplinary Educational Studies, 8 (2), 1-12.
- Švarcová, J., Harantová, L., & Gabrhel, V. (2013). Statistical analysis of student's interest in creative professions in the Czech Republic. International Journal of Mathematical Models and Methods in Applied Sciences, 7 (2), 444-451.

Selected talks

- Gabrhel, V., Šenk, P., Lazor, M., & Ondráčková, J. (2016). Travel Behavior in Central and Eastern Europe: a Bratislava Case Study. Paper presented at the World Conference on Transport Research – WCTR 2016 Shanghai in Shanghai, People's Republic of China.
- Gabrhel, V. (2018). Public opinion on automated vehicles: the Czech context. Paper presented at the conference Silniční konference 2018 in Ostrava, Czech Republic.
- Gabrhel, V., Zámečník, P. (2018). Concerns related to the interaction between autonomous vehicles and other transport systém users. Paper presented at the conference Road Safety on Five Continents in Jeju, Republic of Korea.
- Šimeček, M., Gabrhel, V., Togel, M., & Lazor, M. (2016). Travel behaviour of seniors in Central Europe: a comparative study of Brno and Bratislava. Paper presented at the conference NECTAR Joint Cluster 2 and Cluster 3 International Workshop "The role of planning towards sustainable urban mobility" in Brno, Czech Republic.