Zsofia Voros
Curriculum Vitae September 17th, 2023

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EDUCATION

University of North Carolina at Chapel Hill   Chapel Hill, North Carolina
Bachelor of Science Computer Science   *August 2015 – May 2019*
Major GPA: 3.681/4.00 — Cum. GPA: 3.38/4.00

University of North Carolina at Chapel Hill   Chapel Hill, North Carolina
Bachelor of Science Mathematical Decision Sciences   *August 2015 – May 2019*
Major GPA: 3.684/4.00 — Cum. GPA: 3.38/4.00

SKILLS AND INTERESTS

- **Computer Languages —** Python, R, SQL, Rust, C++, C, MATLAB, Git
- **Machine Learning** — Python (scikit-learn, TensorFlow, Keras, PyTorch), R, MATLAB
- **Data (Analysis, Visualization, Storage) —** Python (pandas, numpy, scipy, matplotlib, seaborn), R (dplyr, GGplot2), Tableau, SQL, PostgreSQL, SQLite, MongoDB, AWS, PySpark, Apache Spark, Apache Hadoop
- **Relevant coursework —** STOR 565: Machine Learning, STOR 556: Advanced Methods of Data Analytics, COMP 555: Bio-Algorithms, COMP 550: Algorithms & Analysis, MATH 547: Linear Algebra for Applied Mathematics, STOR 555: Mathematical Statistics, STOR 465: Simulation for Analytics, COMP 585: Serious Games, STOR 415: Optimization, STOR 445: Stochastic Modeling, COMP 521: Files & Databases
- **Interests —** data analytics, data visualization, applied mathematics, deep / machine learning, natural language processing, linguistics, number theory, topology, graph theory, music theory, mathematics and fiber arts, tessellations, game design, game theory

EXPERIENCE

Data Engineer   Durham, North Carolina
Blue Cross and Blue Shield of North Carolina   *July 2021 – June 2023*

- Coordinated efforts in a Master Data Management initiative aimed at standardizing subscriber identification across various systems. Built data pipelines and automated test-scripts for database QA (Dataiku, Python, PySpark, SQL).
- Collaborated with the Performance Guarantee group to manage and analyze internal administrative data to ensure compliance with performance thresholds. Implemented and optimized data pipelines computing said metrics.
- Conducted exploratory work in workflow automation for exporting data to external vendors (Pega, Power Automate).
- Handled CI/CD pipelines for seamless integration of new corporate groups for continuous monitoring and analysis.
- Demonstrated extensive proficiency in Tableau, frequently aiding others in optimizing their Tableau usage and correcting errors. Played a pivotal role in enhancing team efficiency and data presentation quality.
- Coordinated with business owners, QA testers, and platform teams to promote changes into production using defined change management processes.

Rotational Development Program Associate   Durham, North Carolina
Blue Cross and Blue Shield of North Carolina   *July 2019 – July 2021*

- Data Engineering, Strategic Data Management
  - *(Full Data Engineering Experience Listed Above)*
- Advanced Analytics, Data and Analytics
  - Developed predictive machine learning models using Python to forecast food insecurity in NC communities and individual members, to provide a basis for program outreach as a part of Blue Cross NC Food Insecurity initiative.
  - Conducted comprehensive literature reviews and data mining from multiple sources to formulate hypotheses, target pilot program populations, and devise pre-and post-program survey strategies and analysis frameworks.
  - Performed ad-hoc data analysis using Agile methodologies to explore social determinants of health and pinpoint potential target populations for future outreach programs.
- Knowledge Management, Operations
  - Developed and refined standard operating procedures and internal job aids for knowledge management (KM) team.
  - Successfully led a language processing optimization effort to enhance clarity and readability of operations documentation. Deployed solution, which consisted of VBA scripting, web-scraping, and automated reporting.
  - Improved pipeline of SharePoint workflow ingestion to match issues with the most qualified KM team member.
  - Executed comprehensive User Acceptance Testing for Salesforce integrations. Explored various knowledge base migrations, and innovated Salesforce Lightning solutions to address evolving team requirements.

Data Architect Analyst & Business Associate   Durham, North Carolina
Blue Cross and Blue Shield of North Carolina   *May 2018 – August 2019*

- Developed and refined scripts for transitioning existing data models and respective metadata from Erwin to ER Studio.

- Performed data model analysis and cleansing in ER Studio, ensuring integrity across enterprise-level architectures. Authored comprehensive technical documentation and release notes for changes made.

Design & Graphics Editor *(https://www.dailytarheel.com/staff/zsofia-voros)*   Chapel Hill, North Carolina
The Daily Tar Heel   *August 2017 – May 2018*
- Ingested and visualized large datasets, collaborating with editorial teams to produce engaging, informative charts, diagrams, and graphics that aligned with content narratives. Directed page-layouts for the entire newspaper.

Programming Instructor   Raleigh, North Carolina
iD Tech, North Carolina State University   *May 2016 – August 2016 / May 2017 – August 2017*
- Taught Java Programming and Java Programming with Minecraft Modding to classes of 8 students at a time.
- Ensured that all students met the set curriculum goals and completed final programming project.
- Learned software and curriculum for multiple courses and prepared weekly lesson plans.

PROJECTS

- Personal Website (zsofia.me) *(In Progress)* – Personal website detailing small programming projects & personal notes
- CS Machine Learning Final Project *(Project Lead)* – Directed a final student project focusing on the application of machine learning to analyze MOBA gameplay datasets. Used Python and R
- ST Machine Learning Final Project *(Team Member)* – Developed an ordinal regression algorithm with team members to predict heart disease severity in open-source patient data. Used Python
- Modern Web Programming *(Team Member)* – Created a browser-friendly webpage showing an interactive flight map using synthetic airline data. Used HTML, JavaScript, AJAX, Google API, CSS
- Serious Games *(Software Architect and Project Manager)* – Worked with university client to build an educational game for undergraduate students that teaches the process of cell division. Used Unity and C#