

SIGCSE Tutorial Agenda

Integrating Data Science with Non-CS Disciplines: A Tutorial on Developing Non-Traditional Pathways

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| 3:30 - 4:30: Introduction to Process Oriented Guided Inquiry Learning (POGIL) and the Dataset | |
| 3:30 - 3:40 pm | Welcome and Introductions Tutorial Slides: https://bit.ly/SIGCSE_2025_Tutorial_406_Presentation |
| 3:40 - 3:50 pm | Overview of the Data Science Certificate Program |
| 3:50 - 4:00 pm | Program Goals and Research Questions |
| 4:00 - 4:10 pm | Introduction to POGIL |
| 4:10 - 4:25 pm | Introduction to Social Justice Dataset (County Health Rankings 2024 Data): CHR 2024 Data (Subset): https://bit.ly/CHR_2024_Data_Subset CHR 2024 Data Dictionary (Subset): https://bit.ly/CHR_2024_Data_Subset_Dictionary CHR 2024 Data Provenance: https://bit.ly/CHR_2024_Data_Provenance |
| 4:25 - 4:30 pm | Q&A and Discussion |
| 4:30 - 5:30: Using No-Code Tools to Explore a Social Justice Dataset | |
| 4:30 - 5:00 pm | Introduction to CODAP & Exploring the Dataset with CODAP Google Doc (Copy): https://bit.ly/CODAP_CHR_2024_Data |
| 5:00 - 5:20 pm | Introduction to KNIME Google Doc (Copy): https://bit.ly/KNIME_CHR_2024_Data |
| 5:20 - 5:30 pm | Q&A and Transition |
| 5:30 - 6:30: Exploring the Same Dataset Using Python and Investigating ML Algorithms | |

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| 5:30 - 5:55 pm | Exploring Dataset Using Python Python Notebook: https://bit.ly/Python_Visualizations_CHR_2024_Data |
| 5:55 - 6:20 pm | Investigating ML Algorithms Python Notebook: https://bit.ly/Python_ML_CHR_2024_Data |
| 6:20 - 6:30 pm | Wrap-Up and Q&A |
| <p>Post-Tutorial Reflection: https://www.surveymonkey.com/r/NHTC5YB</p>  | |
| END OF TUTORIAL | |