

# ABHIK ROY



## EDUCATION

- Western Michigan University  
Ph.D. in Program Evaluation  
Kalamazoo, MI
- Michigan Technological University  
M.S. in Mathematics  
Houghton, MI
- West Virginia Wesleyan College  
B.S. in Mathematics  
Buckhannon, WV



## PROFESSIONAL EXPERIENCE

Current  
|  
2024

- *Associate Research Scientist*  
Indiana University  
Bloomington, IN
  - **Applying Advanced Research Methods.** Conducting quantitative, qualitative, and mixed-methods studies to address complex academic and policy-related questions.
  - **Developing Competitive Research Proposals.** Leading the creation of grant proposals by defining research objectives, methodologies, and timelines to secure external funding.
  - **Conducting Data Analysis.** Applying statistical, machine learning, and qualitative analysis tools to interpret data, generating insights that advance knowledge and inform evaluation outcomes.
  - **Engaging in Stakeholder Collaboration.** Partnering with external collaborators through a participatory approach to connect research findings with practical applications and inform policy development.
  - **Creating Accessible Data Visualizations.** Designing clear visualizations with careful consideration of diverse abilities, including different forms of color blindness, to effectively communicate research findings to a wide range of audiences.
  - **Leading Research and Evaluation Projects.** Directing research and evaluation projects, meeting project goals, budgets, and timelines.
  - **Presenting Findings.** Developing and delivering presentations of findings, methodologies, and implications to academic and interdisciplinary audiences.

## CONTACT INFORMATION

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## EXPERTISE

Data visualization

Markup using *L<sup>A</sup>T<sub>E</sub>X*

Program evaluations integrating both traditional and machine learning methods

Quantitative, qualitative, and mixed method studies

 programming

Social network analysis

Survey design, administration, and research

Statistical modeling and analysis

Text analytics

Web application development and static/dynamic reporting using



2023  
|  
2016

● *Assistant Professor*  
West Virginia University

📍 Morgantown, WV

- **Authored Peer-Reviewed Publications.** Published over 10 articles in high-impact journals, contributing to advancements in program evaluation, research methodologies, and applied social science.
- **Developed Automated Systems for Data Collection and Analysis.** Established automated systems to streamline data collection, cleaning, and analysis processes, improving efficiency and accuracy across multiple research projects.
- **Designed and Launched Innovative Surveys.** Created and implemented interactive, web-based surveys using HTML, CSS, and JavaScript on the Qualtrics platform, generating over 7,000 responses across multiple projects and studies.
- **Directed and Participated in Evaluations.** Contributed to 12 program evaluations, including serving as the lead evaluator on multiple federally funded grants.
- **Extracted, Analyzed, and Visualized Data.** Processed and visualized data from internal research and remote sources, creating over 20 interactive visualizations using RMarkdown and Shiny for academic and stakeholder dissemination.
- **Mentored Graduate Students.** Guided three Master's students and one PhD student through the successful completion of their research projects, advancing their professional development.
- **Presented at National Academic Conferences.** Delivered presentations at over 20 academic conferences, with a majority being national-level events, sharing research findings with a broad academic audience.
- **Taught Research and Methods-Based Courses.** Instructed over 500 students in evaluation, research methods, measurement, and survey design, focusing on practical, analytical skills in data science.

2016  
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2014

● *Data Analyst*  
University of Kansas

📍 Lawrence, KS

- **Analyzed the Impact of Student Services.** Conducted qualitative and quantitative analysis to assess the effect of advising and engagement initiatives on student retention and graduation outcomes.
- **Built Web Applications and Dashboards.** Automated data extraction and visualization using R and Tableau, improving access and reporting for student-level data from the university's Oracle server.
- **Conducted Research to Improve Retention.** Developed statistical models that identified gaps in student retention strategies, contributing to a 3% to 5% increase in retention rates for at-risk groups.
- **Designed and Executed Questionnaires.** Developed and implemented surveys for approximately 300 students and staff, achieving response rates between 47% and 91% across various projects.
- **Developed an Evaluation Model for Advising.** Created a comprehensive evaluation model by integrating a Delphi study, mixed-methods research, and survival analysis of student retention data.
- **Led Tailored Evaluations.** Conducted needs assessments and led participatory evaluations for non-academic units, focusing on data-driven insights and stakeholder empowerment.

## ▲ SELECT EVALUATION WORK

Current  
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2023

● *Lead Program Evaluator & Methodologist - Healthy Start Initiative (HRSA-19-049 Total Award: \$5,470,000)*  
West Virginia University Research Corporation

📍 Morgantown, WV

- Conducted process, monitoring, and impact evaluations at the program level.
- Designed and validated survey tools, evaluating the experiences of more than 50 participants.
- Generated two comprehensive internal evaluation documents and prepared an evaluation proposal aimed at federal funding renewal.
- Implemented a mixed-methods study of longitudinal and cross-sectional data on smoking cessation in mothers and caretaker experiences.

2022  
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2017

● *Community Program Evaluator & Data Scientist*  
WVCTSI: West Virginia Clinical and Translational Science Institute (2017-NIH 2U54GM104942-02 Total Award: \$20,000,000)  
West Virginia University

📍 Morgantown, WV

- Created over 100 data visualizations and developed four Shiny applications for comprehensive data exploration and research collaboration.
- Developed and disseminated tailored Qualtrics surveys, incorporating HTML, CSS, and JavaScript, reaching over 5,000 individuals.
- Directed local and multi-site evaluation studies for five core medical research and community engagement units.
- Mentored multiple graduate students in social data science, leading them through successful research projects.
- Produced quarterly and annual evaluations, disseminating findings in both print and interactive formats via Rmarkdown.
- Published and presented research on WVCTSI programs in academic journals and at conferences.