Mark Roepke

https:/www.markroepke.me • https://www.github.com/markroepke • mroepke5@gmail.com • 419-889-0724

PROFESSIONAL EXPERIENCE

December 2017 – Present 	*84.51°* 	*Cincinnati, OH*
Senior Data Scientist
- Designing and implementing a personalized recommendation system for digital platforms
- Planning and delivering intermediate R and Python data science workshops to 100+ data scientists
- Created, automated, and communicated a suite of customer-level supervised machine learning models using Apache Spark and Python
- Constructed and developed an opinionated and consistent R package ecosystem for company-wide use to assist data scientists with I/O, branded data visualization and communication, and automation with a team of data scientists

July 2017 – December 2017 	*84.51°* 	*Cincinnati, OH*
Data Scientist
- Created, automated, and communicated a suite of customer-level supervised machine learning models using Oracle PL/SQL, R, and DataRobot
- Designed and delivered introductory R and Tidyverse workshops to 100+ data scientists
- Authored an internal company R package for use by 100+ data scientists with another data scientist
- Evaluated data science platforms like Domino and IBM Data Science Experience for company use as a team

June 2016 – July 2017 	*84.51°* 	*Cincinnati, OH*
Data Analyst
- Inherited and maintained analytical methodology for a customer-level segmentation in SAS
- Actualized a comprehensive customer-level continuous customer preference measure using XGBoost in R
- Created, evaluated, and expanded company-branded ggplot2 theme and color palettes

May 2015 – August 2015 	*U.S. Bancorp* 	*Cincinnati, OH*
Quantitative Financial Analyst (Intern)
- Conducted econometric time series analyses in R for financial stress testing purposes
- Identified determinants of demand and effects of policy changes for various financial products
- Developed financial statement report automation macros in VBA for branch offices

September 2014 – March 2014 	*Beech Acres Parenting Center* 	*Cincinnati, OH*
Fundraising Data Analyst (Intern)
- Selected for volunteer project utilizing fundraising analytics for non-profit organization
- Analyzed over ten years of donation data in Stata to identify effective fundraising techniques via logistic regression

PERSONAL PROJECTS AND OPEN-SOURCE CONTRIBUTIONS

flxr - github.com/markroepke/flxr
- Designed, authored, and communicated an R package to scrape basic IMDB movie data

Personal Website - markroepke.me
- Built and currently maintaining a personal website in Jekyll to share my data science projects and portfolio

Butler County Donut Trail app - markroepke.shinyapps.io/butler_county_donut_trail
- Developed a web app to explore the Butler County Donut Trail using Shiny and leaflet R packages

cattonum - github.com/bfgray3/cattonum
- Contributed median encoding to the feature-encoding R package on CRAN (PR #10)

EDUCATION

2018 – Present   *Johns Hopkins University*   *Baltimore, MD*

Master of Science in Computer Science
Concentration: Database Systems and Knowledge Management (GPA: 4.0)
Relevant Coursework: Introduction to Programming Using Java, Data Structures, Computer Organization
Future Coursework: Foundations of Algorithms, Foundations of Architecture,
           Foundations of Software Engineering, Neural Networks, Natural Language Processing,
           Artificial Intelligence, Advanced Machine Learning

2012 – 2016   *Xavier University*   *Cincinnati, OH*

Bachelor of Arts
Major: Economics; *Concentration*: Mathematics (GPA: 3.628; Quantitative GPA: 3.86)
Minors: Statistics & Business
Relevant Projects:
- Utilized causal impact modeling to estimate economic impact of pro ice hockey
- Built gravity-influenced migration model to test the political dissimilarity hypothesis among the refugee population

Campus Involvement:
- President of the Xavier University Economics Association (2014-2016)
- Xavier University Alternative Breaks (2013-2015)
- New Student Manresa Orientation Group Leader (2013-2014)

AWARDS, SERVICE & CONFERENCES

- Extraordinary Contribution Award - The Kroger Company
  - Individually selected from 400,000+ employees for quarterly stock award for pushing and enabling the organization's data science team to improve and embrace new technologies
- 2017 RStudio::conf Conference Attendee and Tidyverse Train-the-trainer Workshop Completion
- 2018 RStudio::conf Conference Attendee and Advanced RMarkdown Workshop Completion
- Board Member - Xavier University Economics Department Board of Executive Advisors
  - Selected to department's advisory board to assist undergraduate student with data-related projects
- Craig Menderson Memorial Award - Xavier University Economics Departments
  - Awarded to a senior economics major demonstrating excellence in the classroom and outstanding leadership potential
- Xavier University Mortar Board
  - One of eighteen students recognized for achievement in scholarship, leadership and service

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RELEVANT SKILLS

- *Data Science*:
  - Machine learning, recommender systems, EDA, workflow and automation
- *Technologies*:
  - Excellent with R, SQL, Unix
  - Proficient with Python, PySpark, Java, PL/SQL
  - Experience with Scala, SAS, Stata
- *Teaching*:
  - Certified to teach the Tidyverse to beginner and experienced R users by RStudio
  - Experience teaching introductory R and Python courses and intermediate R courses

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REFERENCES

Available upon request