

# Jake Rozran

DATA SCIENCE PRACTICE LEAD & ADJUNCT PROFESSOR OF DATA SCIENCE

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## Summary

- Data & technology professional with 8+ years of real-world experience in data science (using SQL, R, and Python), working in cross functional teams (including Product, Engineering, and Operations), and owning workflows from ideation to production (putting ML into production).
- Curious about the changing landscape of technology's impact on our lives and especially passionate about fair and ethical algorithms.
- Able to explain complex subjects to all levels of understanding as an Adjunct Professor of Data Science & Statistics & Data Science Practice Lead.

## Top Skills & Technologies

LANGUAGES	DATABASES	APPLICATIONS	METHODS
SQL	PostgreSQL	Jupyter Notebooks	Data Ethics
Python	Hive/Impala (Hadoop)	RStudio	Data Visualization
R	Athena (AWS)	GitHub	Data Analysis
Bash	SQL/mysql/SQLite	Tableau/Metabase/Redash	Project Management
HTML	Oracle	MS Office Suite	People Leadership

## Experience

### CivicActions

DATA SCIENCE PRACTICE LEAD

Lafayette, CA

Feb 2021 - Present

- **Summary:** Building a Data Science Practice Area with > \$1MM revenue after 12 months; personally focused on data science, people management and coaching, sales, marketing, and project management.
- **Impactful Analysis:** For the Centers of Medicare and Medicaid (CMS), leveraging Natural Language Processing (NLP) in the creation and evaluation of System Security Plans (SSPs) to optimize the Authority to Operate (ATO) process; analyzing AWS usage to forecast annual usage and identify inefficiencies; using graph analysis and NLP to identify related documents to provide enhanced search capabilities.
- **Databases (SQL):** Accessing data from AWS Athena (at CMS) and ClickHouse (internal data).
- **Scripting (Python/R):** At CMS, I utilize Python for NLP projects and R to build Shiny Dashboards and complete bespoke analysis (mainly in RMarkdown documents).
- **Ownership, Dealing with Ambiguity, & Communication:** As the first data science teammate on each project I have supported (and at the company), I have had to focus on explaining the capabilities of our team and iteratively working with clients to understand their needs and providing relevant analysis.
- **Partnership:** Internally, I work hand in hand with our marketing, program management, and sales teams to identify new opportunities for our data science practice area; externally, on each project, I work closely with our clients, product owners, engineering teams, and design teams.
- **Personal Impact:** One of five members of the company's Diversity, Equity, Inclusion, and Accessibility (DEIA) team; responsible for helping improve the company's DEIA practices, including analyzing demographic data, designing surveys to understand company feeling about DEIA, and identifying and improving company policy to be more inclusive.

### Villanova University

ADJUNCT PROFESSOR OF DATA SCIENCE & STATISTICS

Villanova, PA

Aug 2020 - Present

- **Ownership & Communication:** Build the syllabus, lectures, assignments, projects, and tests for undergraduate Data Science, Intro to Statistics, and Intro to Statistics for Biology courses.

- **Personal Impact:** Advise and mentor students by writing recommendations for various programs, helping guide studies for real-world success after graduation, and providing assistance through the stresses of university life.

## New America

PUBLIC INTEREST TECHNOLOGY - UNIVERSITY NETWORK (PIT-UN) EVALUATION COMMITTEE

Washington, DC

June 2022 - July 2022

- **Summary:** Evaluated proposals seeking funding to educate students who can better apply technical understanding and practice to questions of individual rights, justice, social welfare, and the public good, particularly for those members of our society least well served historically and today by existing systems and policies.

## Socure

SOLUTIONS CONSULTANT

New York, NY

Jan 2020 - Feb 2021

- **Summary:** Technical expert on fraud prevention, Know Your Customer (KYC)/Customer Identification Program (CIP), Socure product modules, data science, statistics, and data visualization in support of the sales and onboarding processes.
- **Analysis, Communication, & Dealing with Ambiguity:** Created custom proof-of-concept (POC) analyses for prospective customers - showing the value of Socure versus their current solution(s).
- **Ownership:** Served as the Growth Team's subject matter expert (SME) on data science, creating educational documents and presentations on challenging topics like Area Under the Curve (AUC), false positives, and other model evaluation criteria.
- **Partnership:** Worked with the Marketing Team to create content for the Socure Blog on machine learning techniques.
- **Personal Impact:** Member of the DEI team.

## Xfinity Mobile Risk Management (Comcast)

MANAGER OF DATA ANALYTICS

Philadelphia, PA

Mar 2017 - Jan 2020

- **Summary:** Led and managed the data analytics and engineering team for Xfinity Mobile Credit Risk Management, including hiring and training of staff analysts and engineers, collaborating with and providing analysis for stakeholders, and tracking and prioritizing all team tasking.
- **Ownership & Dealing with Ambiguity:** Invented, designed, and put into production a fraud decision making tool that was responsible for a decrease in month-over-month fraud losses by 92% in 2018 - this tool was implemented while our team dealt with procurement and staffing issues.
- **Impactful Analysis & Communication:** Built and maintained the executive reporting packages for both fraud and credit risk management.
- **Partnership:** Worked closely with product, engineering, and operations teams to handle all aspects of risk management decision making (fraud and credit).
- **Databases (SQL):** Leveraged, maintained, and created tables in both Impala (Hadoop) and Oracle.
- **Scripting (Python/R):** Built a fraud decision making tool that combines custom feature creation, statistical and business rules, and predictive models built in Python, R, and Bash.
- **Personal Impact:** Provided coaching, leadership, and mentorship to all analysts on the Xfinity Mobile Risk Management team.

## Internet Services Engineering (Comcast)

SENIOR DATA ANALYST

Philadelphia, PA

Sep 2014 - Mar 2017

- **Impactful Analysis:** Designed and built predictive models, which improved compromised user account detection times and discovery accuracy – this work was presented internally along with several internal blog posts about the effort.
- **Impactful Analysis:** Created forecasts of user base growth and project completion.
- **Databases (SQL):** Obtained data from Splunk using the Splunk Query Language.

- **Scripts (Python/R):** Utilized R and Python to build and interpret Logistic Regression Models.
- **Partnership:** Worked closely with the product, project, and engineering teams to identify and correctly prioritize analyses.

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Additional work experience is outlined on my LinkedIn Profile.

## Volunteer

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### Govern for America

RESIDENT DATA SCIENCE EXPERT

Katonah, NY

April 2022 - Present

- Provide training and mentorship in data science, data visualization, and data ethics for GFA fellows.

### Data Jawn Conference

ORGANIZER

Philadelphia, PA

April 2019 - Present

- Assisted in promotion, speaker selection, and day-of-event logistics for the Data Jawn, a Philadelphia data conference highlighting the great work of our local data community.

### Montgomery County Public Defender

DATA ANALYST

Norristown, PA

May 2016 - Jun 2017

- Assisted Montgomery County Public Defender to define an analytics strategy to support competitive salaries and fair defence for all Montgomery County residents; created, built, and maintained advanced analysis.

## Education

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### Villanova University

MASTERS OF SCIENCE - APPLIED STATISTICS

Villanova, PA

2015 - 2017

### Drexel University

BACHELORS OF SCIENCE - BUSINESS & ENGINEERING

Philadelphia, PA

2004 - 2009

- Drexel Representative for Student Lobbying Day in Harrisburg, PA, 2009
- Drexel University Traditions Council Treasurer, 2007 - 2009
- Dean's List, 2006, 2008
- Drexel Representative to Colonial Athletic Association's Student Athlete Advisory Committee, 2006
- Drexel University Varsity Soccer Player, 2004 - 2006