

# 7th Annual MIT Policy Hackathon



## Criminal Justice Challenge

Leveraging Data Science to Augment Judicial Decision-Making in Resentencing for High-Stakes and High-Risk Cases



**Redo.io, supported by LexLab UC Law SF 2024 Justice Tech Accelerator**

### Judges Panel

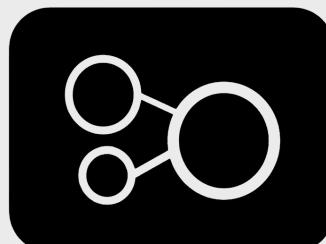
Aparna Komarla - Redo.io Founder

Dr. Susan Champion - Deputy Director at Stanford Law School's Three Strikes Project

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## Background

In 1997, Mr. Peter Heyberger was sentenced to 65 years-to-life under California's "Three Strikes" law for residential burglary. More than two decades of hard work and rehabilitation later, he returned home to his family under the 2018 Prosecutor-Initiated Resentencing (PIR) law. Today, Peter is dedicated to his work as an electrician and maintenance worker for a construction company that prioritizes housing for unhoused communities, veterans, and low-income individuals. [1]

California's "Three Strikes" law, established in 1994, mandated life sentences for individuals convicted of three serious or violent felonies. This law led to a surge in the prison population, including individuals serving life sentences for relatively minor third offenses.

Over the past decade, California has enacted several initiatives to reform its criminal justice system:

### **Proposition 36 (2012)**

Amended the "Three Strikes" law, allowing those with non-serious, non-violent offenses as their third "strike" to petition for reduced sentences. This initiative enabled a more nuanced approach to sentencing, particularly for non-violent offenders.

### **Proposition 47 (2014)**

Reclassified certain non-violent, low-level crimes—such as simple drug possession and petty theft—from felonies to misdemeanors. This initiative sought to redirect resources from incarceration to mental health and addiction treatment programs. By reducing penalties for minor offenses, Prop 47 aimed to alleviate strain on California's criminal justice system, promote rehabilitation, and address the underlying causes of criminal behavior rather than focusing solely on punishment.

### **Prosecutor-Initiated Resentencing (AB 2942, 2018)**

Allows district attorneys to review past cases and recommend resentencing for individuals whose sentences no longer align with current laws or justice standards. This discretion can address cases where the punishment may be disproportionate to the crime, acknowledging shifts in public opinion on rehabilitation and mitigating circumstances. This law is part of a broader movement towards greater prosecutorial discretion aimed at correcting sentencing injustices. [3]

These initiatives reflect California's shift toward criminal justice reform, focusing on fairness, rehabilitation, and addressing past "tough-on-crime" approaches to sentencing.

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## Challenge Question

How can data science help identify individuals harshly sentenced for low-level offenses?

- Who is incarcerated in our prisons and for what reasons?
- Who is eligible for “second-look” case reviews through reform laws?
- Does the data show any bias against certain demographics that should be taken in consideration when evaluating eligibility for justice reform measures?

## Dataset

Participants have access to open **datasets** on the population currently incarcerated in the thirty-five state prisons under the jurisdiction of the California Department of Corrections and Rehabilitation (CDCR) as of December 2023.[4] This dataset was acquired by Redo.io via the California Public Records Act (CPRA) [5], with several privacy-related exclusionary criteria applied.

CDCR identification numbers are anonymized to ensure privacy and security.[6] The dataset includes information on demographics, prior offenses, and current offenses for incarcerated individuals. The variable cdcno refers to the unique MD5 hash identifier for each individual in the CDCR prison system. Additionally, participants can utilize the **Resentencing Eligibility Model** to generate a “first-pass” cohort using eligibility standards that were implemented in several counties.

Participants are encouraged to

- Develop Innovative Tools
  - Create graph-based visualizations for better data comprehension.
  - Develop a system to create sub-cohorts of offenders (demographics: gender, age, repeat offender; offense type: drug related, petty theft; etc.)
  - Implement similarity scoring for sentences and pattern discovery.
  - Expand data collection methodologies to encompass the rest of the U.S.
  - Utilize Generative AI for automated cohort generation using natural language commands.
  - Analyze cohorts of eligible, ineligible, and borderline cases.
- Increase Data Accessibility
  - Develop platforms or interfaces that make the data and results accessible to a broader audience, including prosecutors, defense attorneys, and affected individuals.

## Impact of the challenge

Redo.io is currently supporting eligibility determination for Prosecutor Initiated Resentencing (PIR) in three California counties.

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They have identified roughly 150 candidates for PIR in Los Angeles County (a small subset of whom will be resentenced by the court upon further case reviews), and roughly 500 candidates state-wide. The results from this hackathon will help expand eligibility determination for reform laws throughout California and the U.S. broadly. As a result, more cases will make it to the desks of DAs and public defenders for a second-look.

New research methods will help identify unjust and unfair sentences currently being served in California prisons. Therefore, not only do prosecutors benefit from this knowledge, but California citizens can also access data that informs broad narratives about crime and public safety.

## Additional Notes

- Ethical Considerations: Participants should consider the ethical implications of their work, ensuring data privacy and addressing potential biases in their analyses.
- Collaboration: Cross-disciplinary collaboration is encouraged to create solutions that are both technically sound and legally viable.
- Resources: Participants may refer to legal texts, prior case studies, and existing models to inform their approaches.

## Notes

[1] Peter Heyberger - For the People

(<https://www.forthepl.org/story/peterheyberger#:~:text=Peter%20Heyberger%20returned%20home%20from%20prison%20in,for%20residential%20burglary%20and%20attempted%20residential%20burglary>)

[2] PIR progress as of 2022:

[https://www.rand.org/content/dam/rand/pubs/research\\_reports/RRA2100/RRA2116-1/RAND\\_RRA2116-1.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RRA2100/RRA2116-1/RAND_RRA2116-1.pdf)

[3] Prison population datasets: <https://data.world/redolio/ca-prison-sentences> (data.world), [https://github.com/redolio/offenses\\_data](https://github.com/redolio/offenses_data)(GitHub)

[4] California Public Records Act (CPRA): <https://post.ca.gov/California-Public-Records-Act-FAQs>

[5] Note: Data and analyses in this repository are independent of any and all partner organizations of Redo.io, including but not limited to the Three Strikes Project at Stanford University and LexLab. Redo.io acquired this dataset via FOIA laws and it is fully distinct from the datasets obtained under data-sharing agreements with government agencies that Redo.io supplies technology solutions to.