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## [Iacs-masters] ES298: New course at the interface of social science & data science focused on Law Enforcement Reform

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Fri, Jan 22, 2021 at 10:24 AM

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To: [REDACTED]

Folks,

We have a new, one time course this semester on a real world project.

BLUF: This is a big data class to analyze the efficacy of a new policing technique, C3 Policing, in the North End of Springfield MA. The course enrollees will be organized as teams to analyze 10 years worth of data and develop a publication regarding whether or not it worked.

This is a project that I have been working on for 10+ years with community members and law enforcement agencies operating in the North End of Springfield MA. This particular neighborhood was overrun with gang activity thru 2010.....it had the cheapest heroin in America, gun violence, food insecurity, open air drug markets.....it was bad. Some Army buddies of mine who had served in Iraq and Afghanistan had an idea of adapting counterinsurgency methods to form community partnerships....effectively offering themselves to the residents of the North End as instruments for them to clean up their own community.

It seems to be working....the policing strategy has moved to other neighborhoods in Springfield with similar problems.

We taught a course on this in 2012 that received quite a bit of press:

60 Minutes: <https://www.youtube.com/watch?v=d8Ls3YSulCw>

NY Times: <https://www.nytimes.com/2012/05/01/us/springfield-mass-fights-crime-using-green-beret-tactics.html>

Nature: <https://www.nature.com/news/a-data-driven-war-on-crime-1.10389>

After the piece ran, we had requests for support from communities and police departments across the US. Amsterdam Police department sent personnel to be trained...we put together a training team to teach police and community leaders from Central America on our techniques.

Now we have 10 years of data.....crime, public health, housing, education....all mapped back to published scientific reports about what in a community is affected by gang violence. It is a complicated, multifactorial problem.....we have the data....and now we are asking for students to join us in the form of a course this semester to help analyze the data and have the opportunity to join us co-authoring a report on what might be the most significant advance in law enforcement practice in the last quarter century.

Please consider taking this course. Take a look at the attached penta chart that will detail the skills you will learn and the societal impact of this course. You won't get another opportunity like this in your life:

### ENG-SCI 298R: Data Fusion in Complex Systems: A Case Study

Taught by Professors Kit Parker and Pavlos Protopapas

<https://canvas.harvard.edu/courses/87238>

This course will involve analyzing data collected as part of a research project at Harvard SEAS that aims to evaluate the efficacy of a policing model in the North End of Springfield, MA. This model, known as C3, is derived from counterinsurgency philosophy and has been in use in the neighborhood since 2009. This analysis will serve as a case study for making sense of real-world, often messy, data.

#### Topics covered in the course:

1. Data cleaning data processing: missing data, outliers
2. Linear models using sklearn
3. Ethics / Algorithmic Fairness

4. Non-linear models and Neural Networks
5. Methods of model interpretation
6. Experimental Design and A/B testing

**If interested, please fill out the following form:**

For any questions, please reach out to [engsci298r@gmail.com](mailto:engsci298r@gmail.com).

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