Growing Trust and Transparency in Communities Where Predictive Algorithms are Deployed

Amen Ra Mashariki, Ph.D.,
Urban Analytics Practice Lead, Esri
Fellow, Harvard Kennedy School

Current State of Affairs

- Cities are aggressively deploying analytics teams or solutions to improve the lives of residents.
- Universities are growing their data science programs, as well as their urban analytics research focus such that personnel capability in this area is growing rapidly.
- Urban centers are growing and shifting at such aa rapid pace that there is a race to provide strong analytics solutions to Cities via, private sector, academia, non-profits and others.
- Citizens and activist groups are becoming more and more interested in how their government is using data on their behalf and how they are communicating the decisions they make with the data they have. (Data 4 Black Lives , Data & Civil Rights, mappingpoliceviolence.org)
- Police departments across cities internationally are aggressively deploying predictive policing technology

Baltimore Mayor Crime Prevention Press Availability

- What to Deploy ?
- Where to Deploy?

TECHNOLOGY

Facial Recognition Is Accurate, if You're a White Guy

The New York Times

By STEVE LOHR FEB. 9, 2018

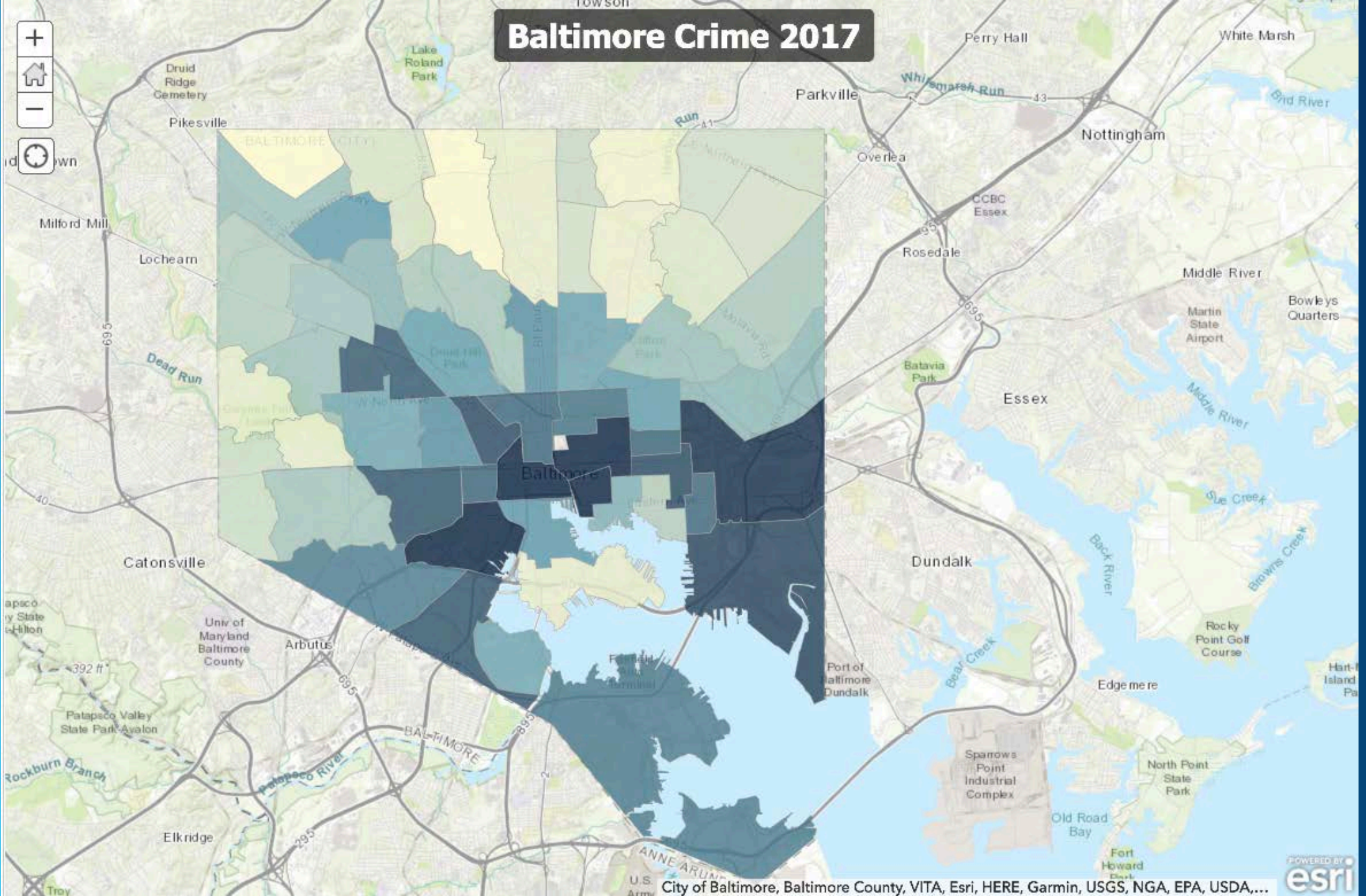
HOW CODERS ARE FIGHTING BIAS IN FACIAL RECOGNITION SOFTWARE

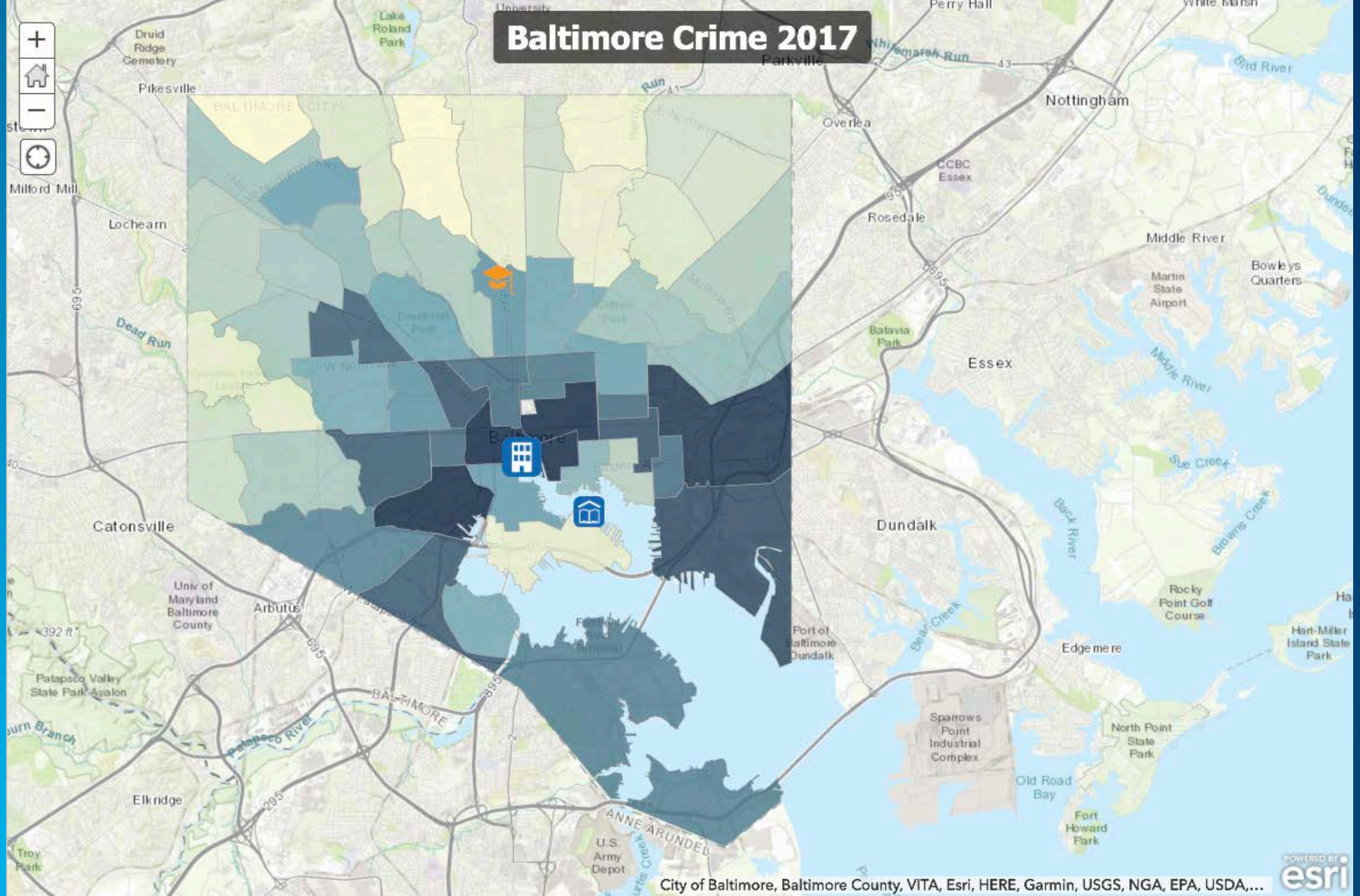
WIRED

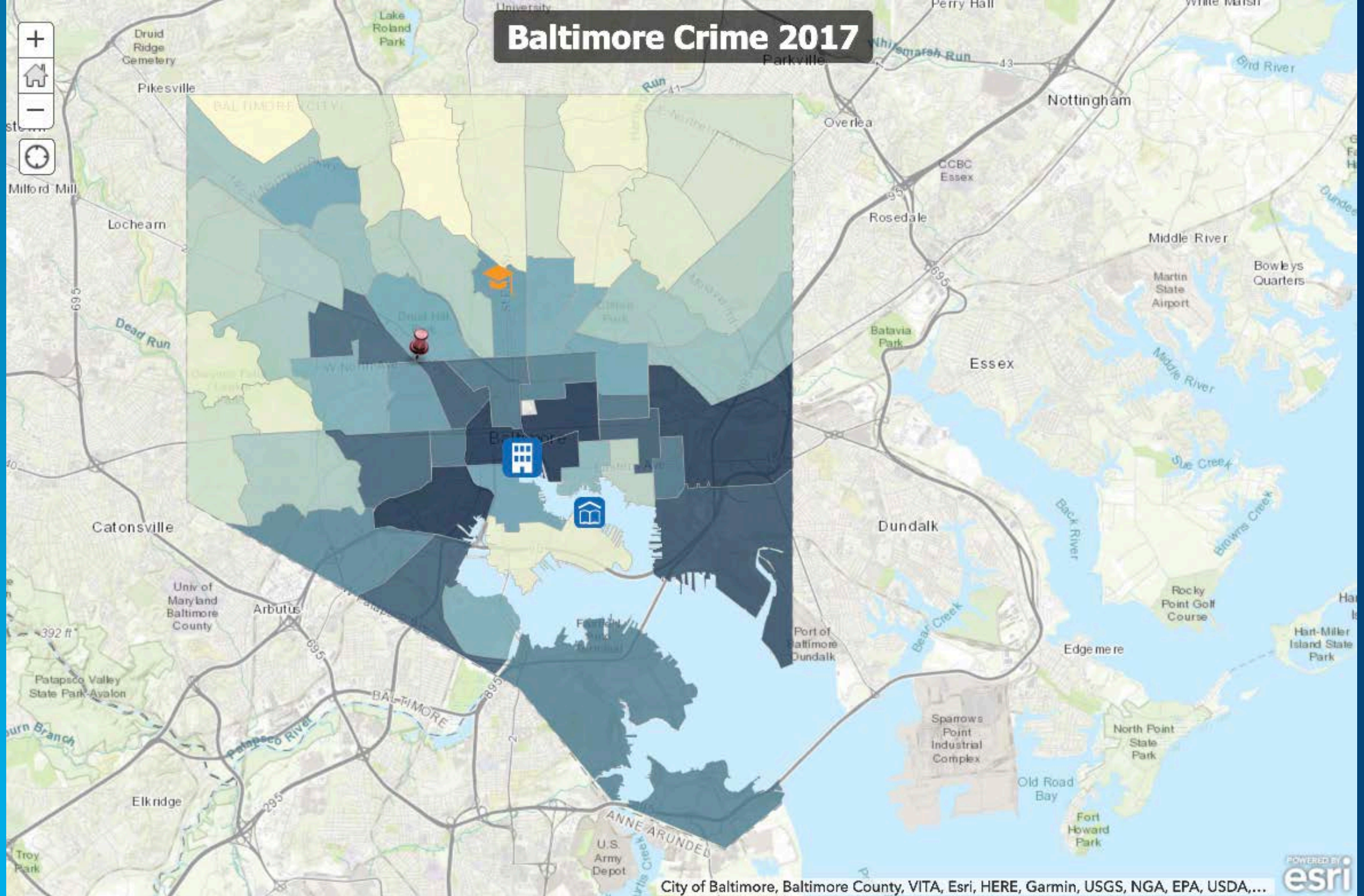
Facial recognition software is biased towards white men, researcher finds

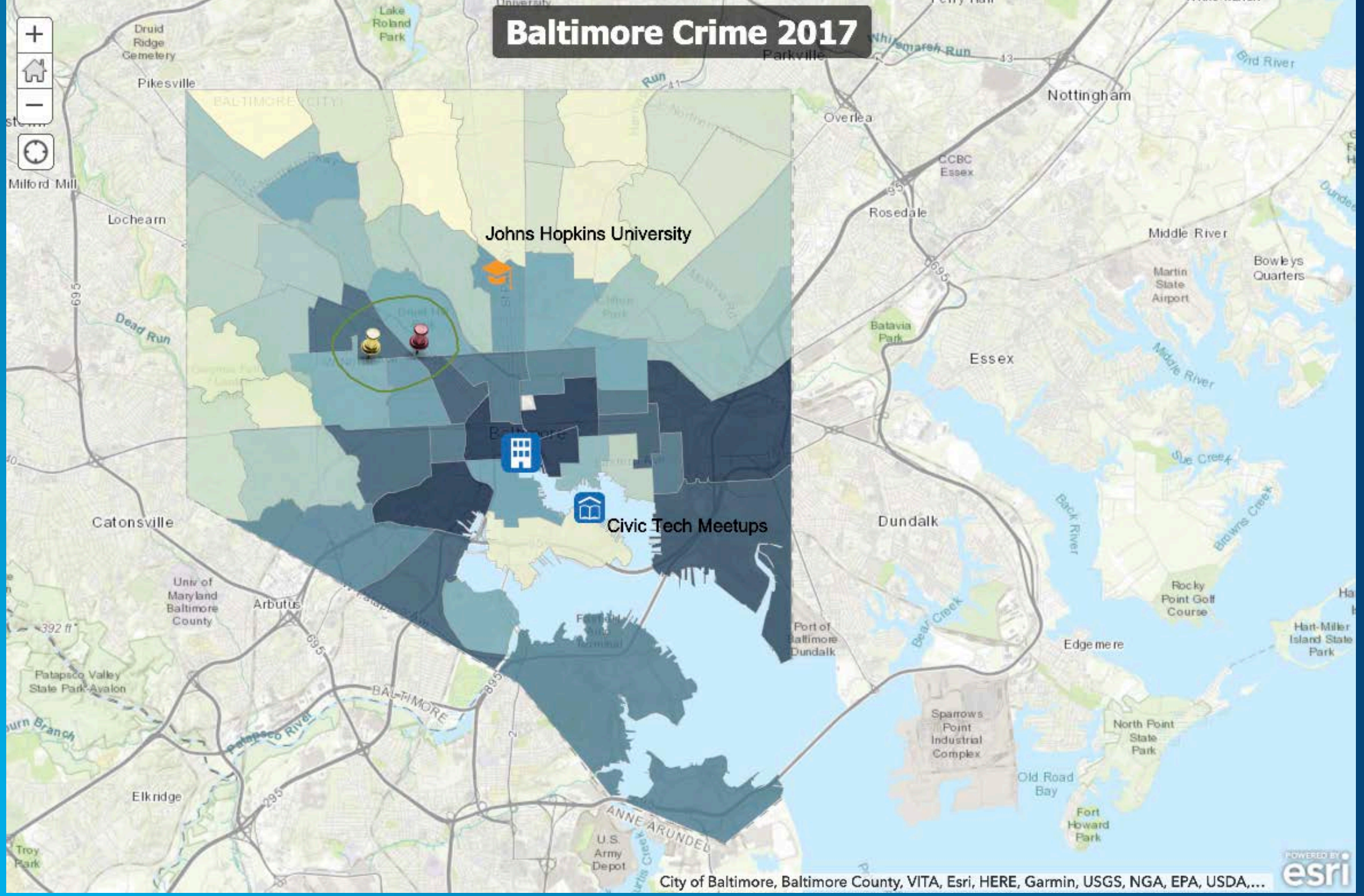
Biases are seeping into software

THE VERGE


Baltimore Crime 2017
Towson
Perry Hall
White Marsh
Lake Roland Park
Druid Ridge Cemetery
Pikesville
Parkville
Whitemarsh Run
Bird River
Nottingham
Overlea
CCBC Essex
Milford Mill
Lochearn
Rosedale
Middle River
Bowleys Quarters
Martin State Airport
Dead Run
Batavia Park
Essex
Baltimore
Catonsville
Dundalk
Univ of Maryland Baltimore County
Arbutus
Port of Baltimore Dundalk
Rocky Point Golf Course
Edgemere
Patapsco Valley State Park Avalon
Rockburn Branch
Patapsco River
Sparrows Point Industrial Complex
North Point State Park
Old Road Bay
Elkridge
Fort Howard
Troy
City of Baltimore, Baltimore County, VITA, Esri, HERE, Garmin, USGS, NGA, EPA, USDA,...
esri


Baltimore Crime 2017
Druid Ridge Cemetery
Lake Roland Park
Pikesville
Parkville
Perry Hall
White Marsh
Whitemarsh Run
Bird River
Nottingham
Overlea
CCBC Essex
Rosedale
Middle River
Bowleys Quarters
Martin State Airport
Batavia Park
Essex
Milford Mill
Lochearn
Dead Run
Catonsville
Dundalk
Univ of Maryland Baltimore County
Arbutus
Port of Baltimore Dundalk
Edgemere
Rocky Point Golf Course
Hart-Miller Island State Park
Patapsco Valley State Park-Ayalon
Patapsco River
Elkridge
Sparrows Point Industrial Complex
North Point State Park
Old Road Bay
Fort Howard Park
U.S. Army Depot
Troy Park
City of Baltimore, Baltimore County, VITA, Esri, HERE, Garmin, USGS, NGA, EPA, USDA,...
esri


Baltimore Crime 2017
Druid Ridge Cemetery
Lake Roland Park
Pikesville
Parkville
Perry Hall
White Marsh
Whitemarsh Run
Bird River
Nottingham
Overlea
CCBC Essex
Rosedale
Middle River
Bowleys Quarters
Martin State Airport
Milford Mill
Lochearn
Dead Run
Batavia Park
Essex
Middle River
Sue Creek
Browns Creek
Back River
Catonsville
Dundalk
Univ of Maryland Baltimore County
Arbutus
Rocky Point Golf Course
Port of Baltimore Dundalk
Bear Creek
Edgemere
Hart-Miller Island State Park
Patapsco Valley State Park Avalon
BALTIMORE
Patapsco River
Sparrows Point Industrial Complex
North Point State Park
Old Road Bay
Elkridge
ANNE ARUNDEL
U.S. Army Depot
Fort Howard Park
Troy Park
City of Baltimore, Baltimore County, VITA, Esri, HERE, Garmin, USGS, NGA, EPA, USDA,...
esri


Baltimore Crime 2017
Johns Hopkins University
Civic Tech Meetups
Druid Ridge Cemetery
Lake Roland Park
Pikesville
Parkville
Nottingham
Overlea
CCBC Essex
Rosedale
Middle River
Bowleys Quarters
Martin State Airport
Milford Mill
Lochearn
Dead Run
Batavia Park
Essex
Middle River
Catonsville
Dundalk
Univ of Maryland Baltimore County
Arbutus
Port of Baltimore Dundalk
Edgemere
Rocky Point Golf Course
Hart-Miller Island State Park
Patapsco Valley State Park-Avalon
Patapsco River
Elkridge
Sparrows Point Industrial Complex
North Point State Park
Old Road Bay
Fort Howard Park
U.S. Army Depot
Troy Park
City of Baltimore, Baltimore County, VITA, Esri, HERE, Garmin, USGS, NGA, EPA, USDA,...
esri

Algorithm Deployment and Transparency Campaign

- Identify a Use case that will drive value within the City of Baltimore
- Identify the analytics question that will need to be solved.
- Define the creators, users, and recipients of the solution algorithm to the analytics question.
- Identify all data sources that will and can be used by the algorithm.
- Show whom the “algorithm” impacts, how it will impact them (short and long term), how they can contribute to the development (ideation), input on how and where it will be deployed, and
- Build and deploy the “algorithm”.
- Translate into “community speak”, what the algorithm does and the data sources that are being used.
- Provide visibility into tracking the outcomes of the deployed analytics algorithm.
- Maintain a capability for community feedback.
- Provide ability to iterate on this process in a continuous fashion.