

# DATA SCIENCE FOR THE PUBLIC GOOD

Delivered by Biocomplexity Institute of Virginia Tech

Directors: Gizem Korkmaz and Aaron Schroeder, Social and Decision Analytics Laboratory (SDAL)  
Student Outreach: Dr. Shernita Lee, Education and Outreach (EO)

## Program Description

The **Data Science for the Public Good (DSPG)** program equips new generations of scientists with the skills they need to inform intelligent governmental policy and decision-making. DSPG is delivered by the **Social and Decision Analytics Laboratory (SDAL)**, a leading laboratory in the Biocomplexity Institute of Virginia Tech, located at **Virginia Tech Research Center in Arlington, VA**. SDAL combines expertise in statistics and social & behavioral sciences to develop quantitative methods and evidence-based research to inform decision-making and evaluation.

Every summer, SDAL researchers and DSPG students team up to work on projects that focus on the interface of data analytics and social science to address real problems at the local, state, and federal levels.

- Horizontally and vertically integrated team research (multidisciplinary) with dedicated graduate students, postdocs and faculty
- In collaboration with sponsors from local, state and federal governments
- Expert training in essential tools for statistical computing, including Hadoop, R, Python, and GIS
- Professional training through development workshops and seminars
- Individualized mentors working closely with students
- Opportunity to interact with decision-makers in industry and government agencies and attend policy events on Capital Hill and the surrounding area.
- Technical report and publication opportunities

### Criteria for Open Data Portals Offer Best Practices for Websites

- AUGUST 1, 2016  
POSTED IN: DEVELOPMENT TR@K, NEWS AND ANNOUNCEMENTS, STUDENTS IN THE NEWS

Mark Almanza, Virginia Tech; Madison Arrsburger, Virginia Tech; Jessica Flynn, Cornell University; Adrienne Rogers, Virginia Tech; Will Sandholz, University of California Berkeley; Emily Stark, Austin Peay State University; and Iowa State University graduate students Millicent Grant and Samantha Tyner



DSPG 2017 fellows, undergraduate students, SDAL faculty and postdocs during a training.

## DSPG Fellows

- Graduate students (Masters and PhD) enrolled at any U.S. university can apply for funded fellowship positions
- Selection through a competitive national search
- Possess high quantitative, statistical, computational and programming skills
- Lead, support, and guide the VT undergraduate students together with SADL faculty and postdocs



## DSPG Undergraduate Students

The program is open to **all VT undergraduate students** through the Honors college. Requirement is to enroll in the following courses:

### Summer I

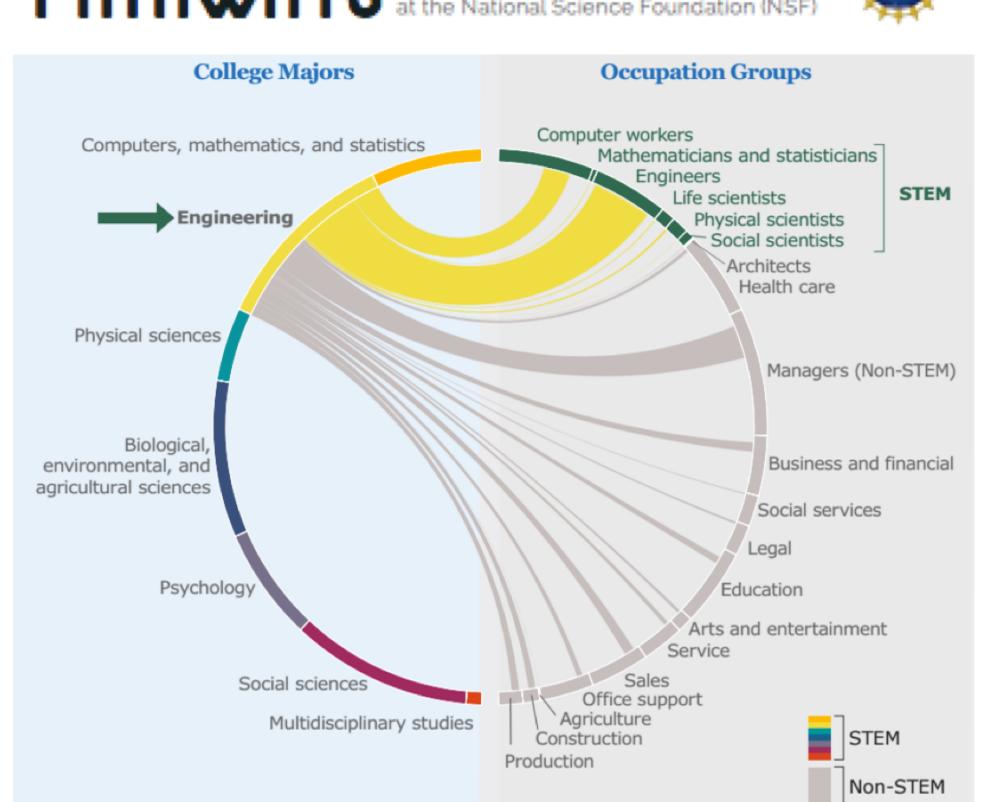
- UH 4504: Honors Discovery and Innovation Studio (3 credits)  
UH 4994: Honors Undergraduate Research (3 credits)

### Summer II

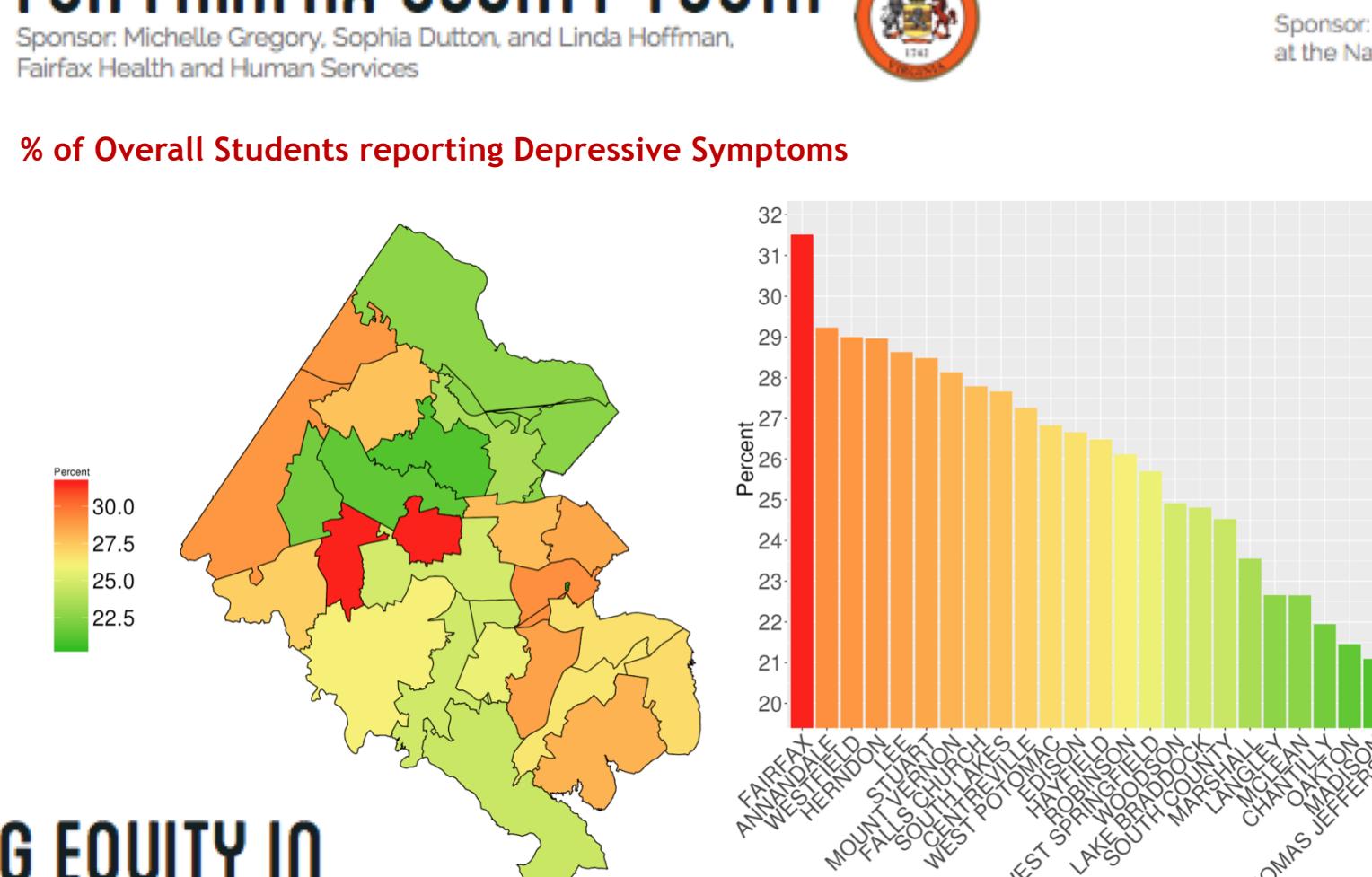
- UH 4504: Honors Discovery and Innovation Studio (3 credits)  
UH 4994: Honors Undergraduate Research (3 credits)

## A Wide Variety of Projects

### IDENTIFYING STEM EDUCATION PATHWAYS



### EXPLORING MENTAL HEALTH SERVICES FOR FAIRFAX COUNTY YOUTH



### MODELING THE IMPACT OF OPEN SOURCE SOFTWARE: NETWORK OF R PACKAGES

