

Ryan Craven, Ph.D.

JUNIOR DATA SCIENTIST

CONTACT

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PROFESSIONAL SUMMARY

Junior data scientist with a background in research and biomedical science. I have always enjoyed exploring data and striving to learn from it, whether taking in-game statistics as a manager with the Yale lacrosse team or analyzing patient test orders for trends. I am excited to expand my skill sets using Python, R, SQL, and machine learning to enhance my ability to clean, explore, learn, and use data while leveraging my analytical mindset and research skills to overcome new challenges.

SKILLS

- Python, R, R Shiny, SQL
- Machine learning
- Research project design
- Critical thinking

EDUCATION

NASHVILLE SOFTWARE SCHOOL

SEPT 2019 - PRESENT

DATA SCIENCE BOOTCAMP

VANDERBILT UNIVERSITY

AUG 2010 - DEC 2015

PH.D. IN MICROBIOLOGY AND
IMMUNOLOGY

YALE UNIVERSITY

AUG 2006 - MAY 2010

B.S. IN MOLECULAR CELLULAR AND
DEVELOPMENTAL BIOLOGY

EXPERIENCE

JUNIOR DATA SCIENTIST

NASHVILLE SOFTWARE SCHOOL | SEPT 2019 - PRESENT

Nine-month intensive data science introduction program learning the languages, skills, and methods in data science exploration and storytelling through real world projects. Skills utilized include Python, R, R Shiny, and SQL. Projects include:

- **Capstone:** Twitter sentiment analysis during pandemic to detect changes that result from key events or policy changes. Performed using Python, spaCy, and vader. Data presented using R and R Shiny.
- **Midstone:** Designed an R Shiny application to explore how measles vaccination rates impact case counts on a global and national scale:
https://ryancraven.shinyapps.io/Measles_vax_rates/
- Compared referral patterns between most healthy and least healthy states by exploring Medicare billing data
- Created predictive model for a trucking company to prevent truck breakdowns based on on-board engine data using Python and scikit-learn
- Designed a report generator for Nashville Metro Public Works to pull monthly reports analyzing trash collection complaints using Python and ipywidgets
- Analyzed Tennessee education data to determine if inequality is a useful predictor of high school graduation rates in R

MEDICAL LAB SCIENTIST

VANDERBILT UNIVERSITY MEDICAL CENTER | JUNE 2017 - PRESENT

- Communicable Disease Response Unit: member responsible for testing and shipping high risk samples, including testing for the novel coronavirus (COVID-19)
- Teaching role both in classroom and hands-on setting of students and fellow employees
- Introduce workflow optimization through testing new methods and suggesting ways to alter daily workflows

MICROBIOLOGIST

TENNESSEE DEPARTMENT OF HEALTH | JAN 2016 - JUNE 2017

- Worked to increase workflow and capacity by testing new assays and machines
- Lead role in assay test that included training lab personnel from within and outside the organization
- Introduced use of route planning application to reduce trip time for retail food testing

BIOMEDICAL RESEARCHER

VANDERBILT UNIVERSITY MEDICAL CENTER | AUG 2010 - JAN 2016

- Developed and executed independent research project
- Participated as part of a team to complete research and complement the work of other lab members
- Critical thinking to troubleshoot and develop assays