# **DUNCAN GATES**

As a soon-to-be graduate of Oregon State University with focuses in a variety of fields I have found my interests primarily coalesce around translating data into insight, through the application of statistics, coding, and deep understanding of individual issues. After my internship experience this summer working for Data Science for the Public Good<sup>7</sup>I have enhanced my focus on team based projects that will have significant positive impacts on the lives of others with the skills I have developed over the course of college.

Currently searching for a position that allows me to build tools leveraging a combination of visualization, machine learning, and software engineering to help people explore and understand their data in new and useful ways.





## **EDUCATION**

Corvallis, OR

2020 2017

B.S. in Economics w/ minors in Actuarial Science and Political Science Oregon State University

- · Thesis: The Relationship Between Income Taxation, Social Benefits, and Wealth Inequality in OECD Countries: Exploring the Factors Contributing to Unequal Household Wealth
- · Honors College Student
- · GPA: 3.82

# RESEARCH EXPERIENCE

2020 2020

#### **Data Science Intern**

Data Science for the Public Good

- Oregon State University
- · Internship was split into training and research. The first half focused on getting interns up to speed on statistics, machine learning, visualization skills, and teamwork based coding. The second half was based on projects that were assigned to teams composed of two undergraduates, one graduate student, and one mentor (generally a professor).
- · Work was done to measure the impact of the installation of a Selective Water Withdrawal Tower at the Pelton Dam on the Deschutes River. This investigation primarily was based on modelling river temperatures, but also allowed for learning, the team built an R Shiny application, presented at scientific symposiums, and worked collaboratively with officials from PGE, ODFW, ODEQ, and cities on the Deschutes.

2020 2019

#### **Undergraduate Research Assistant**

OSU Economics Research

- Oregon State University
- · Conducting economic research under the guidance of numerous professors
- · Field research to gather panel and time series data

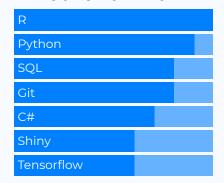


View this CV online with links at duncangates.me/cv/

# CONTACT

- **∑** gatesdu@oregonstate.edu
- **y** gates\_duncan
- github.com/itsthesnake
- **Ø** duncangates.me
- in linkedin.com/in/duncangates

# LANGUAGE SKILLS



Made with the R package pagedown.

The source code is available on github.com/itsthesnake/cv.

Last updated on 2020-09-11.

I have studied and worked in a variety of capacities, ranging from political science to computer science and lifeguarding and kayaking to software coding 2019 2015

# **Rental Location Manager**

Portland, Oregon

Alder Creek Kayak & Canoe

· Spent summers working as a rental location manager for a kayak company.



# **♣** TEACHING/TUTORING EXPERIENCE

2020 2020

## Improving your visualization in Python

Towardsdatascience.com

- · Designed course to teach advanced visualization methods to beginners in Python.
- · Utilizes python, matplotlib, and seaborn.

2020 2020

# Making Your Own Website with R Markdown

duncangates.me/writing

- · Demonstration of how to build a website using R and markdown
- · Finding it more and more useful to document why and how as I do projects

2019 2018

#### **High School Math Tutoring**

Corvallis High School

· Worked as a tutor for high school math students

# SELECTED DATA SCIENCE WRITING

Current 2020

# **Coding is Not Data Science**

(Forthcoming at duncangates.me/writing)

- · How to remember basic and advanced statistics when coding with big data
- · Has coding become accessible enough for anyone to do "data science"?

# ■ SELECTED PRESS (ABOUT ME)

2021

Hopefully someone will write something about me one day!

Nature (jk)

↑ T.B.D.

I am passionate about education. I believe that no topic is too complex if the teacher is empathetic and willing to think about new methods of approaching task.

I write about data science and visualization methodology on my site.2



# ■ SELECTED PRESS (BY)

2020 2020 Fishy Business in the Deschutes? Estimating the Effects of Dam Operations on River Ecology

Data Science for the Public Good

- · Water quality analysis as well as modeling of macroinvertabrate, and ecological patterns and trends
- · Data sourced from ODEQ, ODFW, USGS, NOAA, PGE



# ■ SELECTED PUBLICATIONS, POSTERS, AND TALKS

Current 2019

The Relationship Between Income Taxation, Social Benefits, and Wealth Inequality in OECD Countries: Exploring the Factors Contributing to **Unequal Household Wealth** 

Oregon State University

· Authored with Todd Pugatch

2020 2020 Wealth and Happiness: The Intersection of Consumption, the Opportunity to Consume, and Stability

Oregon State University

· Sole author



1: https://workspace.oregonstate.edu/data-science-for-the-public-good 2: duncangates.me