# Check out Woz-U’s Github for DS Student Resources: <https://github.com/woz-u/DS-Student-Resources>

# Basic Statistics

* [Welcome to Data Science](https://vimeo.com/429838128)
* [Study Skills](https://vimeo.com/400460524)
* [Basic Computer Skills for Windows Users](https://vimeo.com/352609377)
* [Basic Computer Skills for Mac Users Part I](https://vimeo.com/352615114)
* [Basic Computer Skills for Mac Users Part II](https://vimeo.com/352616280)
* [Basic Math Skills](https://vimeo.com/352833910)
* [Probability? Probably](https://vimeo.com/401193638)
* [Basics of Using Excel and Google Sheets](https://vimeo.com/353693628)
* [Variable Types](https://vimeo.com/443250143)
* [*Excel* at Measures of Central Tendency and Distribution](https://vimeo.com/402778034)
* [Confidence Intervals](https://vimeo.com/458358286)
* [Z-scores and z-tests](https://vimeo.com/444755833)
* [Sampling](https://vimeo.com/410440398)
* [Hypothesis Testing](https://vimeo.com/403833869)
* [t-tests in Excel](https://vimeo.com/439121453)
* [Effect Size](https://vimeo.com/452380186)
* [Be There or Be (Chi)-Square](https://vimeo.com/405273502)
* [Data Exploration in MS Excel](https://vimeo.com/427595003)
* [Final Exam Review](https://vimeo.com/406069557)

# Statistical Programming in R

* [Problem Solving and Critical Thinking](https://vimeo.com/407763686)
* [Imposter Syndrome](https://vimeo.com/456013155)
* [Functions and For Loops and Vectors, Oh my!](https://vimeo.com/408696478)
* [Addressing Common Errors in R](https://vimeo.com/410435344)
* [Manipulating Vectors](https://vimeo.com/438392224)
* [Anatomy of a ggplot](https://vimeo.com/430057601)
* [Anatomy of dplyr Functions](https://vimeo.com/418281958)
* [t-tests in R](https://vimeo.com/411258489)
* [Simple Linear Regression](https://vimeo.com/446985965)
* [Data Exploration in R](https://vimeo.com/420538888)
* [Interactive Plots with ggplotly](https://vimeo.com/434212367)
* [Terminal Time](https://vimeo.com/427596329)
* [Final Project Review](https://vimeo.com/413822263)

# Database Foundations

* [Where, Like, and Order By in SQL](https://vimeo.com/415351814)
* [Join me for SQL Joins](https://vimeo.com/416192342)
* [SQL Joins](https://vimeo.com/403016436)
* [Advanced Joins in SQL](https://vimeo.com/403016300)
* [Create and Insert in SQL](https://vimeo.com/403016359)
* [All Keyed Up: SQL Keys and Constraints](https://vimeo.com/451685881)
* [Database with a View](https://vimeo.com/428180710)
* [Views in SQL](https://vimeo.com/403016495)
* [Aggregate Functions and Group By](https://vimeo.com/438373365)
* [Uninstalling and Re-Installing MySQL on a Windows Computer](https://vimeo.com/450219389)
* [Mongo/Atlas Setup](https://vimeo.com/403170719)
* [MongoDB Queries](https://vimeo.com/413344478)
* [Be a Smooth Operator: Query, Logic, Element, and Array Operators – use password 3O?V6#1r](https://exeterlms.zoom.us/rec/share/6ZZ-AqHKyFlJW9bm5nnFYLUGRY_PX6a80SgfqaBbyUwhY1JOZIPw5GV4vtjL17Gm)
* [Updating, Indexing, and Deleting Documents in NoSQL](https://vimeo.com/420531957)
* [Winnie the Pooh and Database Too: Final Project Review](https://vimeo.com/428206689)

# Programming Foundations in Python

* [Variables and Data Types](https://vimeo.com/423010552)
* [Addressing Common Errors](https://vimeo.com/439142696)
* [Lists](https://vimeo.com/428204013)
* [if: watch workshop then pass; else: fail](https://vimeo.com/426836051)
* [Dictionaries](https://vimeo.com/426779811)
* [def Learn\_Functions:](https://vimeo.com/432014267)
* [Coding with Class](https://vimeo.com/426091587)
* [Using Jupyter Notebook and Pandas](https://vimeo.com/427596949)
* [Numpy](https://vimeo.com/460783739)
* [Final Project Review: Building a To-Read List](https://vimeo.com/428355483)

# Data Wrangling and Visualization

* [Data Wrangling in Python](https://vimeo.com/429857151)
* [Data Wrangling in R](https://vimeo.com/436301467)
* [Data Transformations in Python](https://vimeo.com/430577617)
* [Data Recoding in Python](https://vimeo.com/443250851)
* [Data Recoding in R](https://vimeo.com/449951217)
* [Data Visualization in Python](https://vimeo.com/432027835)
* [Data Visualization in R](https://vimeo.com/438414531)
* [Data Visualization in Tableau](https://vimeo.com/452425515)
* [Creating Infographics](https://vimeo.com/459412103)
* [Choosing the Right Statistic](https://vimeo.com/434221066)
* [Practice Scenarios for Choosing the Right Statistic – Part I](https://vimeo.com/453879671)
* [Practice Scenarios for Choosing the Right Statistic – Part II](https://vimeo.com/460790119)
* [Final Project – Data Exploration in Tableau](https://vimeo.com/441195408)
* [Final Project – Data Exploration in Python](https://vimeo.com/447671224)
* [Final Project – Data Exploration in R](https://vimeo.com/455256451)

# Modeling

* [Regression Background and Assumptions](https://vimeo.com/436309839)
* [Regression in R](https://vimeo.com/463655964)
* [Logistic Regression in R](https://vimeo.com/465050172)
* [Stepwise Regression in R](https://vimeo.com/438421794)
* [Simulating Data](https://vimeo.com/465628018)

# Machine Learning

* [K-Means and k-Nearest Neighbors – password 7R=Yu52&](https://exeterlms.zoom.us/rec/share/99VEd5Pu_X9LTNLg0kr8VPIYJJjYX6a8gXUY_qZfxU-9xBcf1SemAXKw3c8_Z_yu)
* [Decision Trees and Random Forests – password 8rN6$VJX](https://exeterlms.zoom.us/rec/share/xuopD-v1_1hJGtLiynPcdL8nLN3qaaa8hiEd-_QJxRrCkeahwGPaJMgN_6cFdwkK)
* [Natural Language Processing](https://vimeo.com/441207100)

# Intermediate Statistics

* [Basic Statistics in Python](https://vimeo.com/444962753)
* [Advanced Chi-Squares in R](https://vimeo.com/443263319)
* [One Way ANOVAs in R](https://vimeo.com/444752189)
* [Power](https://vimeo.com/447003939)
* [Final](https://vimeo.com/447710352) Project in Python

# Metrics and Data Processing

* [Business Metrics](https://vimeo.com/449819055)
* [Process Capability](https://vimeo.com/449957069)
* [Factor Analysis Theory and Interpretation](https://vimeo.com/451698272)
* [Factor Analysis Coding](https://vimeo.com/452290735)

# Agile Project Management

* [Crafting a Project Proposal](https://vimeo.com/452439270)
* [Scrum and Kanban Using Trello](https://vimeo.com/453883176)
* [Final Exam Concept Review](https://vimeo.com/455253689)

# Introduction to Big Data

* [What is Big Data?](https://vimeo.com/456037958)
* [MapReduce, Hive, and Sqoop](https://vimeo.com/456790695)
* [Spark, Scala, and More!](https://vimeo.com/458401059)
* [Redundancy and Real-Time Data](https://vimeo.com/459422096)
* [Amazon Web Services on a Windows Machine – Password x5y9DFA?](https://exeterlms.zoom.us/rec/share/xGyTLbG2dYlKOPu1ORPHhVN0UERTCptO6VVS3YkY9_JneVkXG8nX92M75mTlxWzH.3GUunvuEhnSjPAqo)
* [Final Concept Review](https://vimeo.com/461912376)

# Final Group Project

* [Introduction to Final Project](https://vimeo.com/463278627)
* [Finding Good Data](https://vimeo.com/465045798)
* [Determining Data Wrangling Requirements](https://vimeo.com/465837537)

# All Students

* [How to Google Like a Pro](https://vimeo.com/416182456)

# Guest Speakers

* [Everything you Need to Know to Start at Kaggle](https://vimeo.com/390106863)
* [Graduate Amy Gerrish: Where She is Now One Year Later](https://vimeo.com/355576179)
* [Insights from the Verizon Connect Experience Research Team](https://vimeo.com/363430719)
* [Anatomy of a Business Analyst](https://vimeo.com/410643350)
* [An Introduction to Computer Vision](https://vimeo.com/419678332)
* [Python in the Environmental Sciences](https://vimeo.com/432373045)

# Final Project Presentations

* [Business analysis of staffing benchmarks](https://vimeo.com/405485549)
* [Prediction of planets most likely to sustain life](https://vimeo.com/394842626)
* [Determination of Salary Disparities](https://vimeo.com/372985353)
* [Prediction of Breast Cancer](https://vimeo.com/372982723)
* [Changes in Autism Over Time / Facial Recognition of Autism with Computer Vision](https://vimeo.com/408687925)
* [Factors Influencing Life Expectancy Around the World](https://vimeo.com/409506220)
* [How Baseball Player Salary and Valuation has Changed Over Time](https://vimeo.com/409610644)
* [Predicting Life Expectancy Using Machine Learning](https://vimeo.com/409833039)
* [Predicting Unemployment](https://www.youtube.com/watch?v=ddz-_xqcxfI&feature=youtu.be)
* [Student Determines if He’s a Data Scientist with Data Science](https://www.youtube.com/watch?v=MDco6gLG8hU&list=PLWQotQwcXkVbVb9ZMaT-AA9F5tKxHmliu&index=12)
* [Salary Disparities between Sex and Race](https://vimeo.com/372985353)
* [Sales Predictions for Walmart Kaggle Competition](https://vimeo.com/426809635)
* [Relationship between Radio Advertising and Business Foot Traffic](https://vimeo.com/426864800)
* [Predicting whether Murders get Solved](https://vimeo.com/430465820)
* [Racial Differences in Recidivism](https://vimeo.com/438939604)

# Life Skills

* [Budgeting](https://vimeo.com/429405755)
* [Living with Chronic Conditions](https://vimeo.com/440877529)
* [A Better Night’s Sleep](https://vimeo.com/455247956)