The evolving education model – adapting to the fact paced needs of the industry

The Education Revolution

Tools

Portfolio

Certifications


BOND
UNIVERSITY


MACQUARIE
University


SCIENTIA
MANU ET MENTE
UNSW
SYDNEY


Curtin
University


ANCORA IMPARO
MONASH University


LA TROBE
UNIVERSITY


SWIN
BUR
NE
SWINBURNE
UNIVERSITY OF
TECHNOLOGY


THE UNIVERSITY OF
SYDNEY


NATURAM PRIMUM COGNOSCERE RERUM


SEEK WISDOM
THE UNIVERSITY OF
WESTERN
AUSTRALIA


University of
South Australia


DEAKIN
UNIVERSITY AUSTRALIA


POSTERA CRESCAM LAUDE
THE UNIVERSITY OF
ELBOURNE


UTS
UNIVERSITY OF TECHNOLOGY SYDNEY


THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA


JAMES COOK
UNIVERSITY
AUSTRALIA

MODERN DATA SCIENTIST

Data Scientist, the sexiest job of the 21th century, requires a mixture of multidisciplinary skills ranging from an intersection of mathematics, statistics, computer science, communication and business. Finding a data scientist is hard. Finding people who understand who a data scientist is, is equally hard. So here is a little cheat sheet on who the modern data scientist really is.

MATH & STATISTICS

- ☆ Machine learning
- ☆ Statistical modeling
- ☆ Experiment design
- ☆ Bayesian inference
- ☆ Supervised learning: decision trees, random forests, logistic regression
- ☆ Unsupervised learning: clustering, dimensionality reduction
- ☆ Optimization: gradient descent and variants

PROGRAMMING & DATABASE

- ☆ Computer science fundamentals
- ☆ Scripting language e.g. Python
- ☆ Statistical computing packages, e.g., R
- ☆ Databases: SQL and NoSQL
- ☆ Relational algebra
- ☆ Parallel databases and parallel query processing
- ☆ MapReduce concepts
- ☆ Hadoop and Hive/Pig
- ☆ Custom reducers
- ☆ Experience with xaaS like AWS

DOMAIN KNOWLEDGE & SOFT SKILLS

- ☆ Passionate about the business
- ☆ Curious about data
- ☆ Influence without authority
- ☆ Hacker mindset
- ☆ Problem solver
- ☆ Strategic, proactive, creative, innovative and collaborative

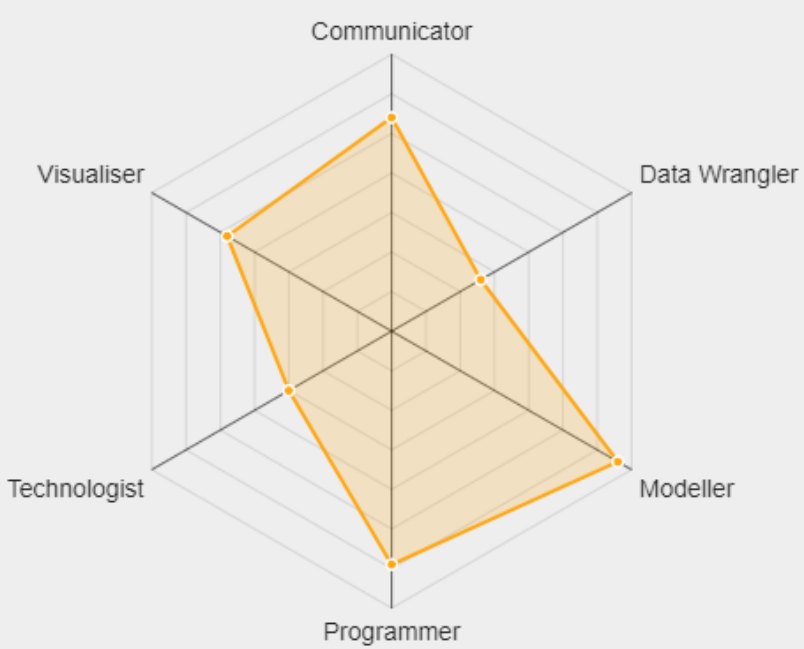
COMMUNICATION & VISUALIZATION

- ☆ Able to engage with senior management
- ☆ Story telling skills
- ☆ Translate data-driven insights into decisions and actions
- ☆ Visual art design
- ☆ R packages like ggplot or lattice
- ☆ Knowledge of any of visualization tools e.g. Flare, D3.js, Tableau

MANGO SOLUTIONS PRESENTS: THE DATA SCIENCE RADAR CHALLENGE

Mango Data Science Radar Results

You are a Modeller



By creating quantitative descriptions of your data, you create insight that is a key deliverable for your team.

You interpret the meaningful reasons for features in a dataset.

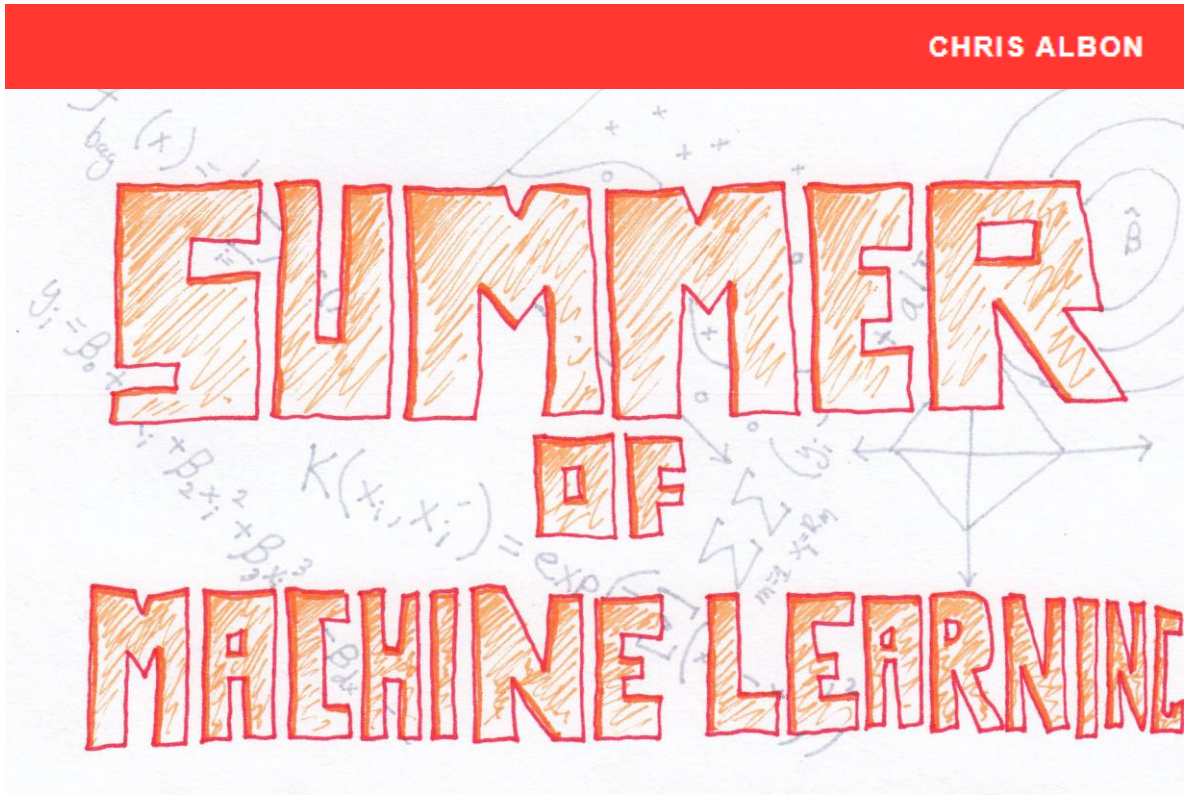
You also pay attention to the detail of underlying assumptions, limits and exceptions when describing a system.

You are familiar with a variety of mathematical methods for describing dynamic systems and are highly skilled in using software that implements these.

You use a variety of graphical and numeric techniques to verify that you are delivering a high quality result that can be used to predict and optimise future performance.

When you are on the team, if there is information that can be gleaned from a system, you will find it.

Source: www.mango-solutions.com/radar



From June 1st to September 30th I will make a four month sprint to become a better data scientist and machine learning engineer, filling the dog days of summer with reading, writing, coding, and running. And the finish line? Eight concrete, quantifiable goals for the next 122 days:

1. Work through 200 machine learning tutorials online.
2. Watch or listen to 100 hours of video lectures or podcast episodes on machine learning.
3. Read 20 books on relevant machine learning topics.
4. Create 400 #machinelearningflashcards to study and memorize.
5. Create 504 tutorials or posts on my personal site.
6. Create 100 "recipes" for a forthcoming machine learning book.
7. Run 500 miles.
8. Lose 40lbs.

source: chrisalbon.com/blog

DREAMING OF DATA

a data science journey

July 2015 – Sept 2016

Data Science Books
Data Smart: Using Data Science to Transform Information into Insight (Aug-15)
R and Data Mining – Examples and Case Studies (Jan-16)
An Introduction to Statistical Learning with Applications in R (Mar-16)
Learning Bayesian Models with R (Mar-16)
Data Science from Scratch: First Principles with Python (Apr-16)
Getting Started with Python Data Analysis (May-16)
Python Machine Learning (Sep-16)

Mathematics Books
Khan Academy – Probability and Statistics (Jul-15)
Comprehending Behavioral Statistics (Aug-15)
Coursera – Data Analysis and Statistical Inference (Nov-15)
Statistics for Dummies (Dec-15)
Statistics II for Dummies (Jan-16)
Statistics Done Wrong (Feb-16)

Programming Books
Codecademy – Python (Jul-15)
Programming for Everybody (Getting Started with Python) (Aug-15)
Python Data Structures (Aug-15)
Hands-on Programming with R (Nov-15)
Hello! Python (Dec-15)
Python for Informatics (Jan-16)
Learning Python (Feb-16)
DataCamp – Intro to Python for Data Science & Intermediate Python for Data Science (Mar-16)
qwikLABS Amazon Web Services Tutorials (Mar-16)

General Books
Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die (Jan-16)
The Theory That Would Not Die: How Bayes' Rule Cracked the Enigma Code, Hunted Down Russian Submarines, and Emerged Triumphant from Two Centuries of Controversy (Apr-16)
The Signal and the Noise: Why So Many Predictions Fail – but Some Don't (Nate Silver) (Aug-16)

edX & Columbia U: Data Science and Analytics XSeries
Statistical Thinking for Data Science and Analytics (Jan-16)
Machine Learning for Data Science and Analytics (Feb-16)

Coursera & University of Washington: Machine Learning Specialization
Machine Learning Foundations: A Case Study Approach (Mar-16)
Coursera – Machine Learning: Regression (Apr-16)
Coursera – Machine Learning: Classification (May-16)
Coursera – Machine Learning: Clustering and Retrieval (Aug-16)

Coursera – Data Science at Scale Specialization
Data Manipulation at Scale: Systems and Algorithms (Nov-15)
Practical Predictive Analytics: Models and Methods (Nov-15)
Communicating Data Science Results (Jan-16)
Capstone Project (Feb-16)

Apache Spark
Udemy – Taming Big Data with Apache Spark and Python – Hands On! (May-16)
edX – Berkeley U – CS105x Introduction to Apache Spark (Aug-16)
edX – Berkeley U – CS110x Big Data Analysis with Apache Spark (Sep-16)

Other Data Science Related Courses
Coursera – Machine Learning (Sep-15)
Kaggle & the Titanic Data Tutorial (Dec-15)
Stanford's Statistical Learning (Feb-16)
Mathematical Monk – Machine Learning (Feb-16)
Podcasts I Listen To (Mar-16)
Stanford Natural Language Processing Video Series (Apr-16)

Coursera – Data Science Specialization
The Data Scientist's Toolbox (Jul-15)
R Programming (Aug-15)
Getting and Cleaning Data (Aug-15)
Exploratory Data Analysis (Sep-15)
Reproducible Research (Oct-15)
Statistical Inference (Nov-15)
Regression Models (Dec-15)
Practical Machine Learning (Jan-16)
Developing Data Products (Feb-16)

source: dreamingofdata.wordpress.com

Rutger Ruizendaal Follow

Data Science, Machine Learning & Deep Learning. Visit my website at http://www.rutgerruizendaal.com

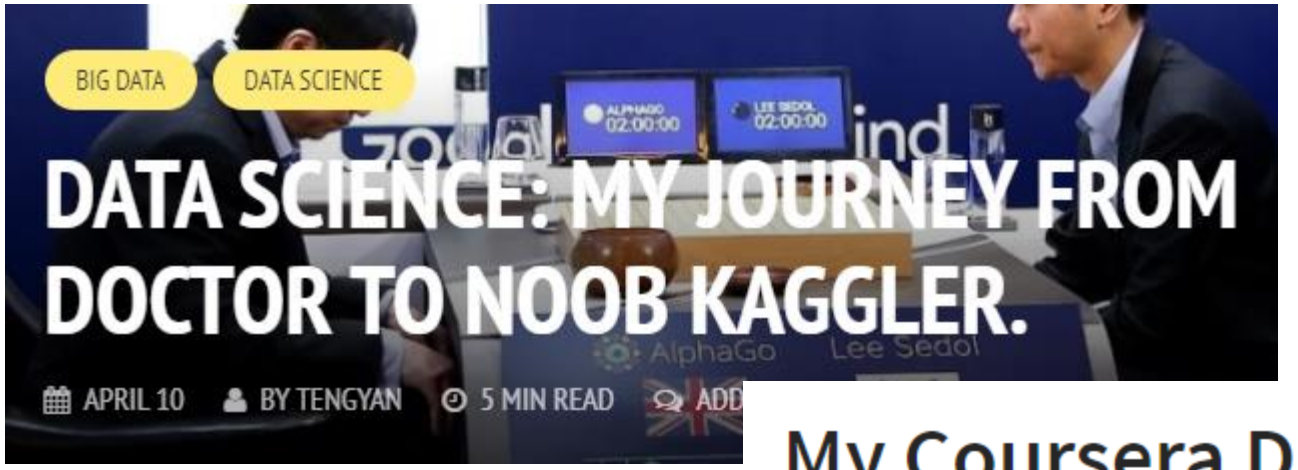
Apr 20 · 8 min read

My Journey into Data Science

Welcome to my blog!

Top 20 Data Science MOOCs

ON AUGUST 16, 2015 / BY DEVENDRADESALE / IN DATA SCIENCE



Shreyas Raghavan Follow

Jun 16 · 9 min read

How to begin your own data science journey!

mrkr188 / Data-Science-MOOCs

Code | Issues 0 | Pull requests 0

No description, website, or topics provided.

My Coursera Data Science Specialisation Journey

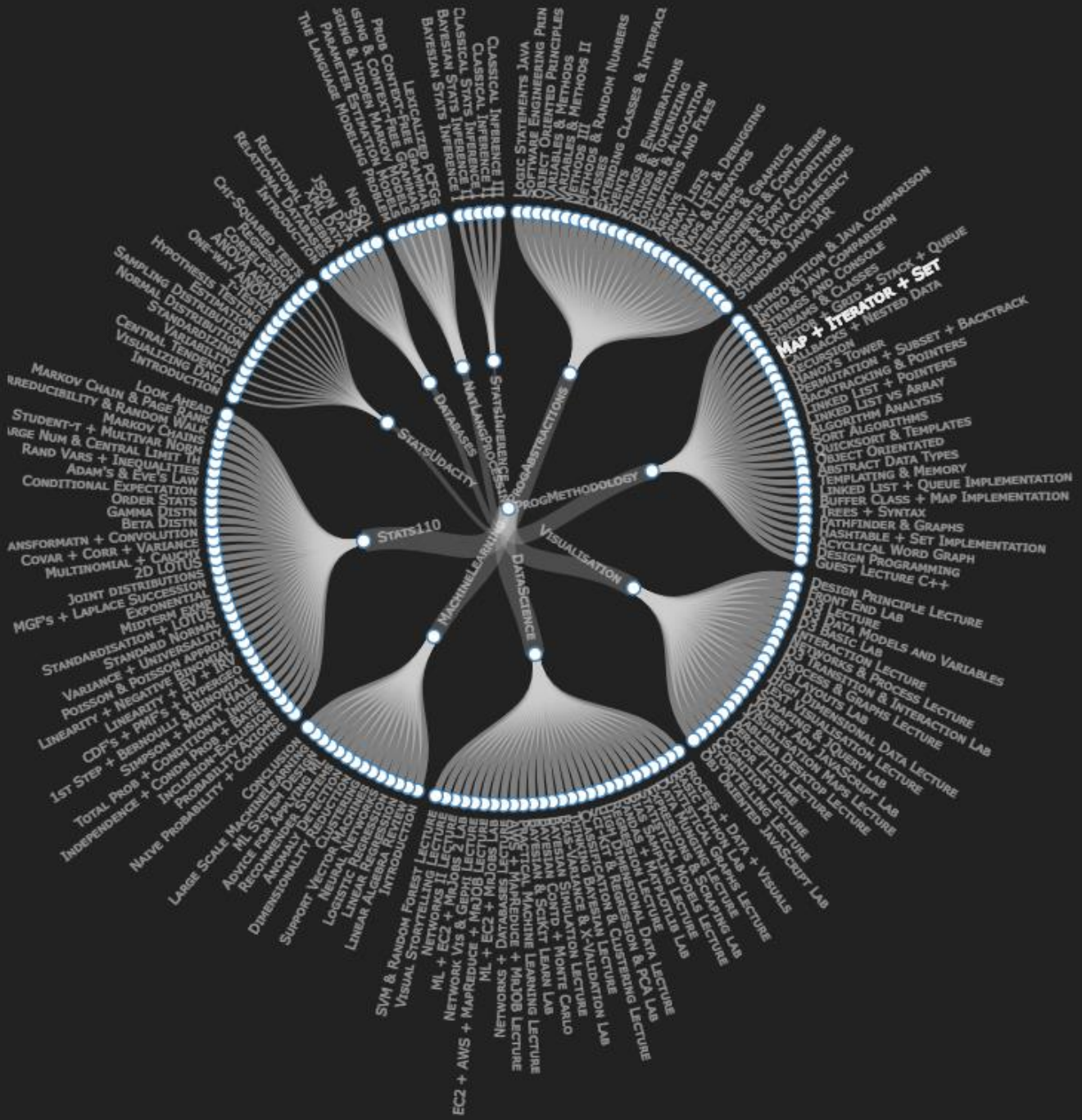
Published on September 4, 2016

Felix Liao + Follow

Computer Engineer | MBA graduate | Certified Data Scientist

2 articles

19 4 1



source: datasciencejourney.com/

CrowdANALYTIX

CLOSED

Modeling

Analyzing Telemetry Data To Understand What Makes A Racing Champion

2 Years Ago | 522 Solvers

US$ 7,500 | Public

#Modeling

Go

analyticbridge | A Data Science Central Community

Challenge of the Week

Posted by Vincent Granville on May 14, 2014 at 6:19pm in Data Mining Software View Discussions

The purpose here is to show that with big data, the risk associated with spurious correlations is high. If you are anti big-data (you don't like the hype), this is your chance to make a valid point about reckless processing of big data.

DRIVENDATA

DengAI: Predicting Disease Spread

2 MONTHS, 2 WEEKS LEFT

Using environmental data collected by various U.S. Federal Government agencies—from the Centers for Disease Control and Prevention to the National Oceanic and Atmospheric Administration in the U.S. Department of Commerce—can you predict the number of dengue ...

Divyanshu Suri COMPETE

Analytics Vidhya

Learn everything about analytics

CLICK PREDICTION

— Data Science Hackathon —

Image analysis: Detect and Classify

SAFE PASSAGE: DETECTING AND CLASSIFYING VEHICLES IN AERIAL IMAGERY

Winner: gbarbadillo

SEE THE RESULTS

DATA SCIENCE CHALLENGE

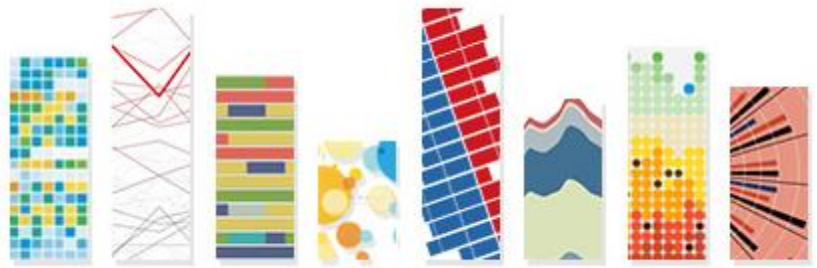
Neural Networks Demystified

Louise Francis, FCAS, MAAA

1996 General
Insurance Convention

Neural Networks v. GLMs
in pricing general insurance

Institute
and Faculty
of Actuaries



Actuaries in Data Analytics

Young Data Analytics Working Group

Actuaries Institute

DAWG Education Sub-Committee

Actuaries DIGITAL

REGISTER SIGN IN

HOME FEATURES INDUSTRIES CURRENT ISSUES ABOUT US ARCHIVE SEARCH

SHARE SHARE SHARE

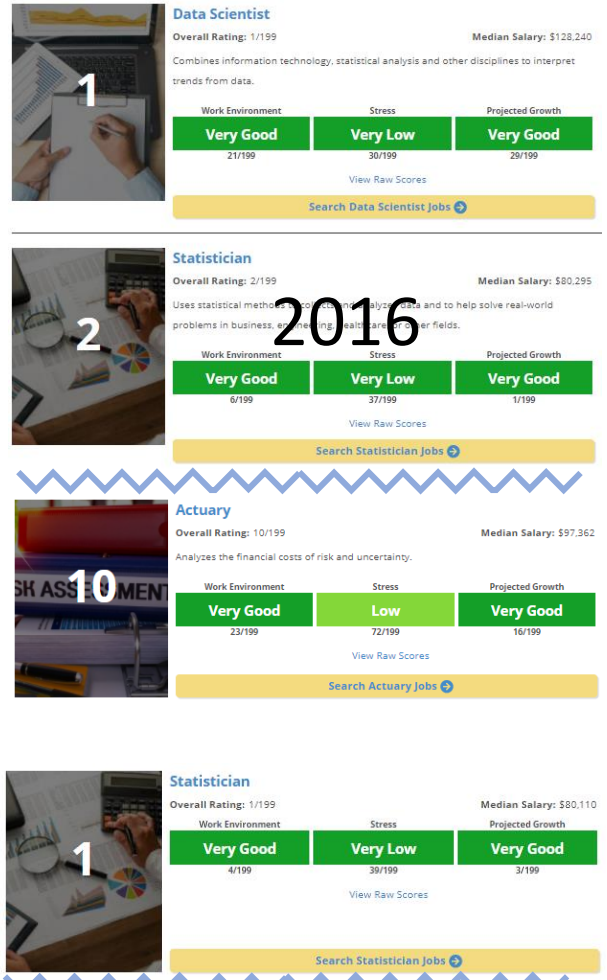
3 4 Print

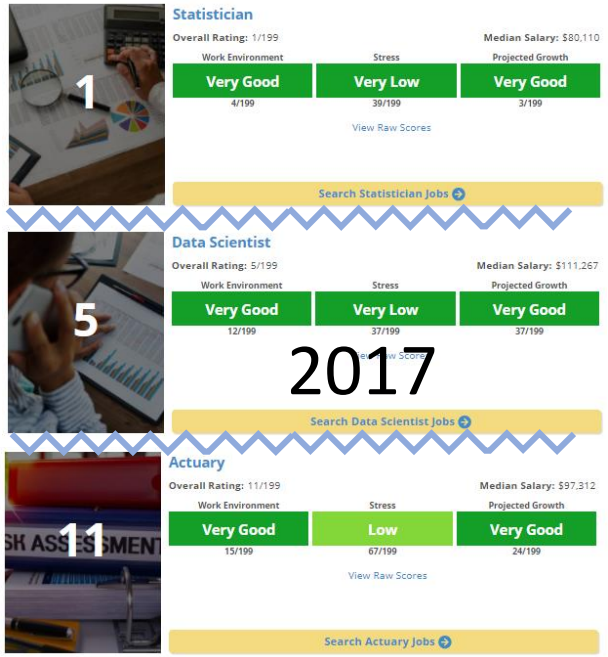
It's official

being an actuary is the best job!

By Estelle Pearson Posted on: May 14, 2015

Source: www.actuaries.digital/2015/05/14/its-official-being-an-actuary-is-the-best-job/





2018

Actuary ?

Data Scientist ?

Jeremy Jarvis
@jeremyjarvis

Follow

"A data scientist is a statistician who lives in San Fransisco" #monkigras

10:13 PM - Jan 30, 2014

61 1,471 890