

Meet a Professional Developer.

Developer: Andrew Szvec

Company: The Cognitive Company

About Andrew (he's description from LinkedIn)

"Andrew specialises in advanced analytics including machine learning, statistical modelling and data visualisation. He has worked across various industries including Banking and Financial Services, Insurance, Retail, Telecommunications, Healthcare, ITC and Government. He has experience deploying machine learning and artificial intelligence solutions on client sites using the latest technologies including Tensorflow and H2O.ai"

I meet Andrew because he was my Lecturer at a Data Science course I took at General Assembly which concluded in week one of this semester. I presented my final presentation from the course to upper management at my work and asked if they would pay for a half day private consultation with Andrew to which they agreed. I work as the IT manager at the Fitness Playground, a Gym chain.

My motivation to meet with Andrew was to discuss two topics:

1. The best infrastructure and architecture to extract data, clean it and present it in Business Intelligence Dashboards for management at work.
2. How to leverage machine learning to build predictive models to improve business efficiency and improve retention members.

Andrew had so very insightful input. After a couple of hours of discussion we came up with a plan to roll out a BI solution for the company. Step one is to write the scripts to extract, clean business data and distribute key business reports in excel format via email to management using python and crontab so the reports can be distributed automatically on a schedule. This alone is already saving me hours each week.

The next step will be to build a web application build interactive visualisations and wrap a layer of security around the reports with login functionality. This will allow management to access real time reports at their leisure. It is my ambition to leverage the knowledge learnt in the subject to build such an application. Although I think I will use plot.ly for the data visualisation because it gives me the power of D3 for visuals and python for working with data.

As for the models I built a model to predict the likelihood of a member cancelling their memberships within a year using a Random Forest algorithm. Andrew has sent some suggestions on how to improve the accuracy of this model and a couple of other models that may perform better. The problem currently is finding the time to implement this as the

BI work has a far higher priority for my boss therefore begrudgingly I have to holster this for now. The good news is that based my ambitions with what I want to do in this space Andrew and I have ensured that when I clean the data for reports I am structuring it in a way that will allow my to feed the data into a model without any need to further manipulate or clean the data so as soon as I can I will be able to explore this space further which is great for my motivation to get the BI app complete as soon as possible.

Note - I failed to get a photo with Andrew by if you wish to verify our meeting you can email him at andrew@thecognitiveco.com or phone him on 0405 597 182