

Aaron Sugarman

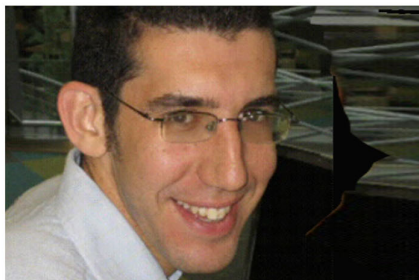
Teitl Swydd: Pennaeth Ymchwil Weithredol, TUI Travel yn Luton

Cymwysterau: BA mewn Mathemateg (Prifysgol Rhydychen), MSc mewn Ymchwil Weithredol (Prifysgol Warwick)

Mae a wnelo Ymchwil Weithredol â chymhwyso technegau dadansoddi i ddatrys problemau sefydliadol. Un dasg nodweddiadol yma yw rhagweld y galw am wyliau. Er mwyn gwneud hynny, rydym yn edrych ar dueddiadau mewn data hanesyddol a diweddar ar draws gwahanol newidynnau, fel tymor y flwyddyn.

Rydym yn cymharu'r galw yn erbyn nifer y gwyliau sydd ar gael – gelwir hyn yn optimeiddio. Mae'n ein harwain ni at y pris y dylem ei godi am y gwyliau a fydd orau i'r cwmni o safbwynt elw.

Mae fy nhîm yn defnyddio technegau mathemategol i ganfod modelau gwaith a datrysiadau i broblemau fel hyn ac eraill fel amserlennu, optimeiddio'r prosesau a dadansoddi effeithlonrwydd y gwahanol weithdrefnau. Un o'r pethau pwysigaf i mi yw medru penderfynu'r hyn sydd bwysig a'r hyn nad yw'n bwysig. Yr un modd, mae'n bwysig i chi fedru cyfathrebu'ch



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canlyniadau a gwneud i eraill ddeall y syniadau. Ac wrth gwrs, mae'n hanfodol y medrwch wneud hyn tra'n gweithio i gwblhau mewn pryd.

Er fy mod wastad wedi mwynhau mathemateg yn yr ysgol, meddyliais

y buaswn yn astudio Cemeg yn y brifysgol. Ond sylweddolais fy mod yn mwynhau datrys hafaliadau cemegol fwy na dim arall, felly trodd fy niddordeb at fathemateg. Yn ystod fy amser yn Warwick, cwblheais leoliad tri mis gyda banc y NatWest ble'r oeddwn yn edrych ar y modd mae ymgeiswyr ar gyfer cyfrifon newydd yn cael eu dewis ar sail credyd blaenorol. Yna euthum ymlaen i weithio i gwmni o ymgynghorwyr rheoli am ddwy flynedd. Yn ystod y cyfnod hwnnw, gwneuthum amrywiaeth o waith, yn cynnwys amserlennu cynhyrchu i'r Ford Mondeo, edrych ar effeithiolrwydd y gadwyn cyflenwi yn Marks & Spencer a hefyd effeithiolrwydd canolfan alw Trainline.

Mae bob amser her newydd a chyflenwad cyson o broblemau newydd sydd angen datblygu modelau newydd ar eu cyfer. Gydag Ymchwil Weithredol nid ydych wedi'ch cyfyngu i un maes ac mae hynny'n cadw'r swydd yn amrywiol a chyffrous.

Aaron Sugarman

Job Title: Head of Operational Research, TUI Travel, Luton

Qualifications: BA Mathematics (University of Oxford), MSc Operational Research (University of Warwick)

Operational research is about applying analytical techniques to solve organisational problems.

One typical task here is forecasting holiday demand. In order to do this, we look at trends in historical and recent data across different variables, such as season of the year. We then carry out an optimisation of demand against capacity. This leads us to the price which we should charge for the holiday which will be best for the company in terms of profit.

My team uses mathematical techniques to find working models and solutions to problems like this and others such as scheduling, optimisation of processes and analysing the efficiency of various procedures.

One of the most important things in my job is being able to decide what is important and what is not. Equally, it is important that you are able to



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communicate results and make others understand the ideas. And of course, it is vital that you can do this whilst working to a deadline.

Although I always liked maths at school, I did think I would study chemistry at university. But I realised that I enjoyed solving chemical equations more than

anything else, so my passion for maths grew from there. During my time at Warwick, I completed a three-month placement at NatWest bank where I was looking at how applicants for new accounts are chosen based on past credit. I went on to work for a management consultancy company for two years. During that time I did a variety of work, including scheduling production for the Ford Mondeo car, looking at the effectiveness of the supply chain at Marks & Spencer and also the effectiveness of the Trainline call centre.

There is always a new challenge and a constant supply of fresh problems which require new models to be developed. With operational research you are not stuck within one field and that keeps the job varied and exciting.