

# SHAN SUN

## PROFILE

I am a tax professional with a range of experience in transfer pricing, international tax, corporate tax and indirect tax. I have a strong focus in data and technology. I work with both structured and unstructured data where I lead, design and implement innovative data-driven solutions to achieve efficiency and gain insights within the finance and tax functions. I have extensive technical and commercial skills from industry and practice experiences to deliver results-driven, fit-for-purpose solutions. My technical knowledge and experience of working with senior executives also mean that I can distil difficult problems into executable actions to deliver effective solutions and achieve stakeholder buy-in along the way.

## EXPERIENCES

### UNILEVER

*Lead for Tax Innovation*  
2019 - present

- Lead, design, implement native global indirect tax analytics project using in-house universal data lake (from SAP instances) and Azure ecosystem to build detective, preventative and predictive tests on VAT/GST
- Lead and design for transfer pricing operation workflow, policy database and exception monitoring application, streamline intercompany data extraction
- Streamline tax data sources for direct, indirect tax and transfer pricing for analytics and risk management
- Lead and design tax audit analytics project using natural language processing model and knowledge graph
- Strategize tax technology direction on data driven tax operating model worldwide
- Implement automatically tax classification machine learning model on purchase to pay business cycle at invoice level
- Develop and implement governance structure for machine learning and RPA tax models for tax risk management
- Design and strategize a global tax platform to integrate various tax technology systems and applications
- Implement end to end automatic machine learning classification model for assigning HS code in Philippines (purchase)
- Consult and assist with building direct and indirect tax dashboard including CBCR analyses
- Set up lessons learned for all tax technology project using powerapps
- Review and select suitable vendors for specific local tax requirements eg CFC assessor, DAC6, MTD

### OMNICOM GROUP INC.

*Global TP Senior Manager*  
2016 - 2019

- Working knowledge of US IRC under S482 and Treasury Regulations thereunder;
- Provide specialised tax services under US treasury regulations, e.g. cost-sharing, IP migrations, ASC 740 audit provision and intercompany financial transactions;
- Plan, manage and defend TP projects (both OECD and US 6662 compliant);
- Discuss and negotiate TP audits with tax authorities (HMRC, IRS, NTA, SAT, ATO, BZSt) to achieve optimal tax positions and conclude long running audits on behalf of clients;
- Efficient project and budget management to ensure deadlines are met;
- Mentor, motivate and manage juniors, and participate in HR processes.

**BDO LLP**  
**(14m in the US & UK)**

*Transfer Pricing Manager*  
2012-2016

- Design and develop cost-efficient data-driven projects (see projects) for tax and finance;
- Identify, risk assess and present planning ideas to international tax and business executives; lead TP planning projects under BEPS and US tax reform;
- Build IP valuations and modelling for acquisitions, migration or other international tax projects;
- Design and prepare global and local TP documentation reports including value chain and business driver analyses, treasury TP on cash pooling, loans, insurance and guarantee fees;
- Assist in drafting intercompany legal agreements tailored to specific transactions;
- Defend and support local international tax audits worldwide and model local risk exposure;
- Provide training and answer technical questions to local agency CEOs and CFOs.
- Contribute product prototype to Annalect R&D Lab on data projects

**Morgan Stanley**

*Commodity Product Controller*  
2011-2012

- Produce commodity trading P&L and explain trading risk exposure;
- Daily power forward curve validation and FX position reporting;
- Month-end processing e.g. TP implementation control, automation change.

**KPMG LLP**

*Tax Assistant Manager*  
2007-2011

- Prepare TP documentation and thin capitalisation reports (2years);
- Prepare and review corporate tax returns, tax bookings (1.5years);
- Rotation program to audit (3m) and indirect tax teams (6m);
- Provide data analytics to senior tax partners (3m).

**SELECTED PROJECTS**

- Indirect Tax Data Analytics
- Tax audit analytics engine
- Direct tax monitoring dashboard
- Transfer Pricing policy workflow tool
- Tax code machine learning auto-tagging
- HS code classification
- Global tax platform design
- Machine learning governance
- CBCR analytics
- Part of speech tagger

**SKILLS**

- Microsoft Power Suite (PowerBI, PowerApps, Flow)
- Azure Databricks, Azure DevOps
- SAP finance module
- SQL
- Python (Pandas, Scikit-Learn)
- Large project management
- UI design and product management
- Microsoft Office and Collaborations (Teams, Sharepoints)
- Mandarin and Japanese
- Published translator

**EDUCATION**

**University of Nottingham**  
**United Kingdom**

*MSc in Economics (with merit)*      2003 - 2005  
*Ph.D Candidate (with grant)*      2005 - 2006

**University of International Business and Economics**  
**P.R. China**

*BSc in Economics (2:1 equivalent)*      2000 - 2003

**QUALIFICATIONS**

**Chartered Accountant**      May 2010  
**Chartered Tax Advisor**      Mar 2010  
First Time Passes, ICAS and CIOT, UK

**Data Science**      Dec 2016  
With Excellence, GENERAL ASSEMBLY, UK

**Machine Learning Engineering**      Jul 2018  
**Applied Data Science**      Dec 2019  
**Deep Reinforcement Learning**      May 2020  
**Natural Language Processing**      Aug 2020  
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## SELECTED TAX TECHNOLOGY PROJECTS

SHAN SUN

### Country by country reporting (CBCR) analysis

*Tools used:*

*Excel, Python 3 (Jupyter Notebook)*

With CBCR data, I brought in additional data points and constructed various ratios to devise a proxy to account for the effectiveness of tax planning. The result of this project alerted senior management any potential tax risk reflected in CBCR from a local tax authority perspective for internal discussion and further investigation. This project also identified internal data collection weakness.

### Visualising intercompany transactions

*Tools used:*

*Excel, Javascript*

Intercompany transactions are difficult to track and analyse using long and complex spreadsheets. The process can be error-prone and time consuming. I created a data visualisation using chord diagrams to represent the intercompany transactions in a clear and straightforward way to efficiently highlight potential risk areas needed to be addressed in cross-border transactions.

### Royalty payment analysis

*Tools used:*

*Excel, Python 3 (Jupyter Notebook)*

In this project, I re-designed a global royalty payment mechanism by extracting data from finance and tax databases and re-calculated possible royalty fee ranges using linear regression. I also provided evidential support for the existing system using logistic regression and random forest. The project then became part of a much larger, ongoing overhaul of the intercompany transaction mechanism within Omnicom, which I designed and led, after obtaining senior management buy-in.

### Local TP automation tool

*Tools used:*

*SharePoint, TechSmith Camtasia*

To improve efficiency, I worked with the IT department to automate the repetitive part of compiling local transfer pricing documentation reports for local subsidiaries. I created and reviewed iterations of TP report automation workflow for the IT department to write an additional web component to our existing intranet on a SharePoint portal. This project achieved a \$140k saving (over three years) from external advisors' quotes for similar off-shelf product. I also provided ongoing training video to all subsidiaries and prepared FAQs to use the tool.

## SELECTED RELEVANT NON-TAX DATA PROJECTS (ALL IN PYTHON3)

### Starbucks optimisation strategy

This project looked at an advertising promotion strategy simulated by Starbucks data to see if it would bring more customers to purchase a specific product. The goal was to optimise several metrics: IRR, NIR etc.

### Customer segmentation

This project analysed a Portuguese distributor dataset using unsupervised learning to best describe the variations in different types of customer annual spending habits across product categories. The aim was to help the distributor with insight to best structure their delivery service to meet customer needs.

### Boston housing price prediction

This project used housing data of suburban Boston to explore and predict home price in Boston using 14 home features recorded in the data set. I built a decision tree to train and test the prediction model, with grid search for parameter optimization.

### Dog breed recognition

This is a deep learning project using Convolutional Neural Network (CNN) to recognise dog breeds from user images. If a dog is detected in the image, the model returns the dog breed name; otherwise it tells the breed most resembles the human face. I used Keras and Tensorflow to train the CNN models on AWS EC2.

### Teach a quad copter to take-off

This challenging reinforcement learning (RL) project used Deep Deterministic Policy Gradient (DDPG) algorithm to teach an agent quad copter to perform the take-off task (moving above ground > 30m) following Richard Sutton's classic text book on RL and Udacity's existing code base for physics\_sim.

### InstaMood

A quick app which scrapes Instagram photos based on customised tags and extracts its main color palette. The major color is then linked to a mood dictionary which creatives can use to understand the most current mood of a given area.

### IBM Watson recommendation system

This project analyzes the interactions that users have with articles on the IBM Watson Studio platform, and makes recommendations to them about new articles they may like. Models used including collaborative filtering (model-based and neighbourhood-based), content-based and knowledge-based ranking.