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# Tanya Tan

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**Business Intelligence & Data Science** | Transforming data into actionable insights and business solutions

- Technical Skills: Python (PyTorch, Tensorflow, scikit-learn), SQL, Snowflake, Tableau, R, Looker, UX Research
- Additional Skills: project management, teamwork, adaptability, self-directed learning

## Education & Professional Certificates

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- **Maser of Computer Science**, *Arizona State University*, AZ (April 2022, expected)
- **AI and Machine Learning MasterTrack Certificate**, *Coursera* (May 2021)
- **Deep Learning Specialization** (2021) & **Data Science Foundations using R**, *Coursera* (2020)
- **Data Scientist Nanodegree & Python for Data Science Nanodegree**, *Udacity* (2020)
- Tableau Analyst Certificate, *Tableau* (2020)
- M.Sc. in Chemistry, *University of British Columbia*, Vancouver, BC, Canada (2012)
- B.Sc. in Chemistry, *Peking University*, China (2009)

## Work Experience

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**Analyst, Sales Operations** | [Cengage Learning](#), Boston, MA | Oct 2020 - Present

- Establish Sales Analytics Tableau Hub from end-to-end:
  - Defining data strategies, mapping, prioritizing analytics needs, and buidling data architecture
  - Scoping and developing reports and dashboards (serving 700+ internal users in Sales and Marketing teams, monthly site traffic 11K+)
  - Facilitating efforts in user training and engagement
- Leverage multiple data platforms (Snowflake, Tableau, Looker, Data Warehouse, CRM) to compile and communicate meaningful insights on sales opportunities, product pricing, customer retention risks and priority decisions
- Collaborate with stakeholders in sales organization, Finance, Marketing, Product, and Data Engineering teams to shorten the path from data to value-added business solutions
- Streamline BI reportng processes for weekly sales performance and digital product usage reviews
- Serve as the data expert and provide insights on reporting improvement, applying rigors in analytical methods and user research, and advanced statistical modeling using SQL, Python, and Tableau
- As a a team, drive operational excellence, sales enablement and customer success through data-driven decision support and process optimization

**Research Analyst, Institutional Research** | *Langara College*, Vancouver, Canada | Dec 2018 - Oct 2020

- Developed interactive Tableau dashboards and reports to support senior management's strategic planning
- Built efficient and reproducible analytics workflows using Tableau, R, Excel, and MS Access
- Managed regular reports of student applications, enrollment, academic outcome and workload

- Conducted statistical analyses to inform course planning, recruitment and marketing strategies
- Analyzed surveys related to program reviews and other organization-wide initiatives

**Education Specialist, Chemistry** | *University of British Columbia, Vancouver, Canada* | 2017 - 2018

- Designed and led UX research to inform design strategy of an online learning app [Alchemy](#)
  - User experience surveys, interviews, stakeholder sessions
  - Concept testing and UX evaluations

**Chemistry Lab Instructor** | *Kwantlen Polytechnic University, Surrey, Canada* | 2016 - 2017

**Teaching Lab Specialist** | *University of Illinois, Springfield, IL* | 2013 - 2016

## Selected Projects

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**Optimizing Starbucks App Offers with Machine Learning Algorithms** | [GitHub Repository](#) | [Blog Post](#)

- Predicted customers' response to in-app offers with 73% accuracy using a random forest model

**Financial Performance Dashboard** | [Blog](#)

- Built a mobile-friendly interactive dashboard with key financial measures e.g. profit & loss, operating expenses and gross sales (prototype with simulated data)

**Digital Customer Retention Dashboard** (*Internal dashboard at Cengage Learning*)

- Provided insights into customized customer retention strategies based on risk segments, customer engagement and potential revenue.

**Sales Incentive Dashboard** (*Internal dashboard at Cengage Learning*)

- KPI dashboard with usage trend, and sales performance measures by territory and by product

**Predicting Collisions using a Simple Neural Network Model** | [Blog Post](#)

- Trained robots to prevent collisions in a simulated environment with 99%+ accuracy, using artificial neural networks

**Boston Airbnb Rental Data Analysis** | [Github Repository](#) | [Blog Post](#)

- Highlighted geographical and seasonal trends in pricing and availability of Airbnb Rentals

**Annual Update Dashboard for Quality Assurance and Process Audit**

- Built an executive dashboard with 360-degree views of marketing demand and department performance

**Data-Enabled Pedagogy and Technology for Critical Thinking and Decision Making Skills** | [Poster](#)

- Co-developed a pedagogical online app [Alchemy](#) to develop learners' critical-thinking skills.

[List of Publications on Google Scholar](#)