Sirui Tao

Address: 3210 Caminito Ameca
San Diego, CA 92037 U.S.A.

Phone: (+1) 858-226-2323
Email: dylantaosirui@gmail.com
URL: https://dylantao.github.io/

EDUCATION

2019 - 2023	**University of California, San Diego**

B.S. Data Science & B.S. Probability and Statistics, Minor in Economics

- 3.94 Major GPA | 3.82 Overall GPA

HONORS & AWARDS

2019 - 2022	*Provost Honor, Warren College, UCSD*
2021 -	*Data Science Student Representative, HDSI, UCSD*
2020 - 2021	*HDSI Research Scholarship, HDSI, UCSD*
20 Spr, 22 Win	*TRELS Research Scholarship, AEP, UCSD*

PUBLICATION

2021	*Bear, D., *Wang, E., *Mrowca, D., *Binder, F., Tung, H.-Y., RT, P, Holdaway, C., **Tao, S.**, Smith, K., Sun, F.-Y., Li, F.-F., Kanwisher, N., Tenenbaum, J., **Yamins, D., and **Fan, J. (2021). Physion: Evaluating physical prediction from vision in humans and machines. In Advances in Neural Information Processing Systems (NeurIPS Datasets & Benchmarks Track) 2021.

ACADEMIC EXPERIENCE

2021 -	**UCSD, CogTools Lab**	UCSD, La Jolla, San Diego, CA, USA
	Assistant Researcher	Jan 2021 - June 2022

- Receive funding from HDSI and TRELS to participate in research on 3D data under PI Judith Fan's mentorship to study intuitive physics, investigating visual perception in humans and machines, primarily working on data analysis and 3D stimulus designs for non-rigid physical interactions.

2020	**UCSD, Academic Enrichment Program**	UCSD, La Jolla, San Diego, CA, USA
	Independent Researcher	Mar 2020 - Aug 2020

- Receive grants to study the potential economic benefit and risks of adopting the "Farm-Institution" model for campus food supply at UCSD through a qualitative and quantitative assessment of UC San Diego's current situation, encouraging UCSD to make an effort to transform into a sustainable public institution.

WORKING EXPERIENCE

2022

Tesla   Fremont, California, USA

Data Scientist Intern   June 2022 - Sep 2022

- Build and deploy end-to-end process-agnostic advanced Statistical Process Control & Quality Disposition tools with automatic alert systems; continuously monitor & improve based on user feedback from the process engineering team;
- Conduct data analyses on various datasets to identify root cause & validate model performance;
- Investigate better lossless image compression solutions, saving 15~30% of theoretically annual image storage.

2021

Bühler Group   Wuxi, Jiangsu, China

Data Scientist Intern at Innovation Center   July 2021 - Sep 2021

- Research and initiate the effort to build an Image-Labeling MLOps feature in our B2B product prototype to optimize the model adaptability for defects detection for a 25-billion USD customer segment;
- Prototype an MVP using Figma & Angular within a cross-functional innovation team;
- Director of Innovation praised the initiative and requested a showcase of this proposal to the whole division;
- Refine and participate in reviewing new analytics features on our IoT platforms to help our customers with their digital twin adaptation journey with better business insight extraction with descriptive & predictive modeling.

2021

J.D. Power   Shanghai, China

Analyst Intern   June 2021 - July 2021

- Optimize the workflow of the quality analytics team by refining the analytics processes via automating data processing and report pipelines, saving more than 200 working hours/ year for the team;
- Provide detailed documentation on Git to ensure continuous usage for teammates from non-technical backgrounds.

2020

Bosch   Wuxi, Jiangsu, China

Data Analyst Intern at MAS (Manufacturing Analytics Solution) Aug 2020 - Nov 2020

- Provide effective data analysis and visualization on Tableau for continuous monitoring of data and parameter tuning to gain valuable analytic insights based on Bosch Industry 4.0 transformation roadmap;
- Cutting down manual inspection and analysis time by providing crucial insight on key bottlenecks and reducing critical bottlenecks diagnosing time by 80% in manufacturing lines with insights on potential optimal parameters;
- Present the dashboards to the Director of Manufacturing Analytics Solution Division at the monthly briefing.

OTHER SKILLS

Software: Python, R, SQL, Web (Angular), D3.js, PyTorch, DevOps, Agile

Data Science: Scalable Analytics, Data Visualization, MLOps, Recommender system, Data Mining

Mathematics: Probabilistic reasoning, Descriptive & Inferential statistics, Stochastic process