## ANNE EN-TZU YANG

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## **EXPERIENCE**

- Data Science Fellow, Insight Data Science (Minneapolis, MN)
- 2019/09 2019/10
- Predicted the air quality inside Paris metro stations to help passengers manage health risks.
- Utilized PROPHET and ARIMA for time series analysis, resulting in XX% forecast accuracy.
- Identified predictors for R = XX correlation using TensorFlow's neural network regression.
- Postdoc, Institute for Intelligent Systems and Robotics (Paris, France) 2018/09 2019/08
  - Expedited the tracking of robotic surgical tools from 2D X-ray images ( $\sim 10ms/\text{frame}$ ).
  - Employed convolutional neural network to reconstruct 3D angles (errors  $< 1^{\circ}$ ).
  - Published results at international conferences, tinyurl.com/cath2019.
- PhD Intern, Sanofi (Bridgewater, NJ)

2017/06 - 2017/08

- Added new functions to more accurately model asthma formation and treatment.
- Performed t-test and anova test on clinical trial data on asthma medication.
- Wrote MATLAB scripts to automate statistical tests and data visualization.
- PhD Candidate, Northwestern University (Evanston, IL)

2012/09 - 2018/08

- Investigated the neural pathway of human's sense of touch using the model of rat whiskers.
- Constructed models in Python and MATLAB to quantify mechanical signals on the whiskers and resultant neural responses in the brain when rats sense contacts or airflow.
- Predicted 4 types of neurons response from 420 sets of 100-ms data sampled at 1kHz.
- Summarized data from > 500 whisker for predictive modeling on rat whisker geometry.

## **SKILLS**

- Languages, Python, SQL, Matlab, LaTeX
- Packages, Pandas, Flask, Numpy, Scipy, TensorFlow, PostgreSQL
- Tools, Git, Jupyter Notebook, Linux
- Knowledge, computer vision, analysis, machine learning, statistics, communications, mathematics, visualization, deep learning, natural language processing, software development, neural network, convolutional neural network

## **EDUCATION**

• PhD, Northwestern University (Evanston, IL)	2012/09 - 2018/08
- Mechanical Engineering	
<ul> <li>Certificate, Kellogg School of Management (Evanston, IL)</li> <li>Management for Scientists and Engineers</li> </ul>	2016/06 - 2016/08
• BS, National Taiwan University (Taipei, Taiwan)	2008/09 - 2012/06

- Mechanical Engineering