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 ($\sim 10ms$/frame).
  - Employed convolutional neural network to reconstruct 3D angles (errors $< 1°$).
  - 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

- **Certificate**, Kellogg School of Management *(Evanston, IL)*   *2016/06 - 2016/08*
  - Management for Scientists and Engineers

- **BS**, National Taiwan University *(Taipei, Taiwan)*   *2008/09 - 2012/06*
  - Mechanical Engineering