CHENYE YANG

 github.com/YangChenye linkedin.com/in/chenye-yang cy2540@columbia.edu
 125 W 109Th ST, New York, NY, US, 10025 (917) 215-3998

EDUCATION

Columbia University, United States   *Sep 2019 - Dec 2020*
M.S. in Electrical Engineering   **Overall GPA: 3.9175/4.3**
Nikola Tesla Electrical Engineering Scholar

Xi'an Jiaotong University, China   *Sep 2015 - Jun 2019*
B.Eng. in Automation   **Overall GPA: 89.42/100**
Honors Electronic and Information Engineering Program (QianXuesen Class)

National University of Singapore, Singapore   *Jul 2017 - Aug 2017*
Summer Program on Unmanned Aerial Vehicle   **Grade: A+**

RESEARCH EXPERIENCES

Skin Temperature Sensing System   *Prof. Xiaofan (Fred) Jiang, Columbia University, Jan 2020 - present*
Research Intern of Columbia Intelligent and Connected Systems Lab.
- Match multiple heads between RGB and thermal image pairs, train and deploy YOLOV3 (head detection) and FSA-Net (head orientation regression), calculate distance using non-identical RGB and thermal camera, etc.
- Learn human-orientated data-driven research. One paper in review for ACM SenSys 2020. Deploying the system in a hospital in New York City.

Khameleon Scheduler in Reinforcement Learning   *Prof. Eugene Wu, Columbia University, Jul 2020 - present*
Research Intern of WuLab Columbia University.
- Create the simulated RL environment, write Q-Learning and SARSA based prefetching scheduler to trade off latency for response quality with the progressive encoded response in cloud-based interactive applications.

Cyber-Physical Energy Systems   *Prof. Jiang Wu, Xi'an Jiaotong University, Oct 2017 - Feb 2019*
Member of XJTU Information-technology Talent Program.
Research Intern of Ministry of Education Key Lab for Intelligent Networks and Network Security.
- Responsible for clustering and analysis algorithms for massive data on energy demand side.
- Learn the procedure of research and big data clustering algorithm in centralized and distributed environment.

PUBLICATIONS

- Peter Wei, **Chenye Yang**, Xiaofan Jiang, "Low-Cost Multi-Person Continuous Skin Temperature Sensing System for Fever Detection" (in review for ACM SenSys 2020)
- Pengyuan Liu, **Chenye Yang**, Jiang Wu, "Hybrid Features Based K-means Clustering Algorithm for Use in Electricity Customer Load Pattern Analysis" *2018 37th Chinese Control Conference*. DOI:10.23919/ChiCC.2018.8483451

PROJECTS

Internet of Things   *Prof. Xiaofan (Fred) Jiang, Columbia University, Sep 2019 - Dec 2019*
- Program ESP8266 to deal with IO, work with APIs, run as server, connect to MongoDB and recognize gesture.
- Design a distributed scalable system to measure soil conditions over long duration at multiple locations via LoRa wireless communication. Data is stored in MongoDB. A website is built for data visualization and systems control.

Big Data Science and Research Training   *Prof. Fan Zhang, MIT, Jan 2018 - Apr 2018*
- Learned Docker, RESTful, Cassandra. Got familiar with Spark, amCharts and D3.js data visualization.
- Deployed the Tensorflow model(MNIST training) and recognition codes to Docker, to create a container identifying handwritten digit submitted by users, and store the data in Cassandra and report the result

TECHNICAL SKILLS

Programming: Skilled in Python, Matlab; Familiar with R, C, C++, C#, CSS, JavaScript, HTML
Software & Tools: **IDE:** PyCharm, Xilinx Design Suite, Keil MDK, Arduino, R Studio
Design: Autodesk Inventor, Altium Designer, LabVIEW, FDTD Solutions
Others: GitHub, Linux, LaTeX(Overleaf), Docker, TensorFlow, OpenCV, Spark, AWS

For more information, please visit my LinkedIn at *linkedin.com/in/chenye-yang/*