CHENYE YANG

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EDUCATION

Columbia University, United States   *Sep 2019 - Dec 2020*
M.S. Research Program 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)

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.
- One paper in review for IPSN 2021. Deployed the system in a restaurant and hospital in NYC.

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.

Optical Quantum Information   *Prof. Xiaoqi Zhou, Sun Yat-Sen University, Feb 2019 - Jun 2019*
Graduation Project. Intern of Optical Quantum Information Lab.
- Solve optimal parameters of grating coupler based on regression analysis and constrained optimization solving.
- Conduct simulation experiment with one-dimensional grating coupler.

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 centralized & distributed clustering & analysis algorithms for massive data on energy demand side.
- Two papers written and one accepted by Chinese Control Conference 2018.

PUBLICATIONS

- Peter Wei, **Chenye Yang**, Hengjiu Kang, Xiaofan Jiang, "SIFTER: A Low-Cost Skin Temperature Sensing System for Multi-Person Continuous Fever Screening" (in review for IPSN 2021)
- Peter Wei, **Chenye Yang**, Xiaofan Jiang, "Poster Abstract: Low-Cost Multi-Person Continuous Skin Temperature Sensing System for Fever Detection" (accepted by SenSys 2020 Poster)
- 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.

Large Scale Stream Processing, Sparse Models for High-D Data, Statistical Learning, Random Matrix Theory

TECHNICAL SKILLS

Programming: Skilled in Python, Matlab; Familiar with R, C, C++, C#, SystemC, 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 website at *yangchenye.github.io*