KAI LIU

Electrical Engineer

Fremont, CA

LinkedIn

liukai5005@gmail.com

EXPERIENCE

Lam Research Corp. *2018.6–Present*
Electrical Engineer *Fremont, CA*

- Develop/implement system identification methods to do on-line/off-line parameter estimation and simulation
- Develop/optimize control systems for pressure, temperature, RF power, impedance matching, motion control systems.
- Develop advanced control technology to improve control system performance using model-based control techniques, such as time-optimal control, iterative learning control, adaptive feedforward control, MIMO decoupling control, gain-scheduling control.
- Develop C/C++ code for real-time closed-loop control embedded integration
- Develop smart embedded systems using machine learning techniques.

Lam Research Corp. *2015 – 2017*
Researcher *Fremont, CA*

- Dynamic wafer temperature control of heaters and chillers.
- Run-to-run data testing software development for fast monitoring the repeatability performance of etching data.
- Multi-Zone temperature modelling and uniformity control in Matlab/Simulink.

EDUCATION

China University of Mining and Technology, Beijing *2018*
Ph.D. in Mechanical & Electronic Engineering

University of California, Merced *2015–2017*
Visiting Scholar in Mechanical & Electronic Engineering

TECHNICAL STRENGTHS

Computer Languages   MATLAB, Simulink, Python, C, MatrixX

DISCLOSURES & PATENTS

Model-based ESC Coolant Supply Temperature Control using Smith Predictor (Pending)