

VINCENT HENG (HE/HIM/HIS)

CONTACT

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6407B Shadow Valley Dr
Austin, TX 78731

Industrial Experiences

- Refining
- Polymers
- Charcoal (pyrolysis)
- Oriented Strand Board
- Consumer Goods
- CEM (boilers, turbines)
- CCS

Skills

- Process Optimization
- OPC/MQTT/SQL
- Python/Structured Text
- Logix
- System Identification
- Design of Experiments
- Usable HMI Design
- Git, CI/CD

Other Interests

- Bike Commuting
- Running
- Composting
- Trying to avoid plastic

SUMMARY

Senior Engineer with process optimization expertise in manufacturing as a third-party engineering consultant. Created total automation solutions for customers that are clear for both plant operators and manufacturing VPs. Experience in managing projects as the field engineer, consistently under-budget or quick to identify budget risk. Modeling and analysis with a first principles attitude but not afraid to use new techniques as needed. First person to take ownership of issues but also first to highlight my team. Most recently at a machine learning startup.

EXPERIENCE

Sr SWE - APC, Petuum {Remote} 2020-2021

Machine Learning in Advanced Process Control

- + Introduced APC algorithms and concepts to traditional ML team
- + Self-Project Managed product MVP with a Fortune 500 company
- + Customer facing, direct correspondence with stakeholders; translator between the internal ML team and external APC customers
- + Created and performed FAT & SAT for Industrial AI product
- + Designated technical correspondent for company VC pitches

Senior Engineer, Rockwell Automation – Austin, TX 2015-2020

Advanced Process Control Engineering Consulting

- + Implemented APC process automation optimizations on brownfields to reduce product variation by 20% to increase production by 10%
- + Led multiple 9-12 month projects with \$1MM budgets as solo engineer
- + Commonly worked with plant operators, engineers, management, Rockwell technical staff, external 3rd party integrators and DoE regulators
- + Debug customer PLC code, PID tunings, gave guidance on hardware upgrades
- + Consistently completed projects **15%** under budget w/ benefits **>20%** estimated
- + Onboarded a new hire on APC implementation, feature selection & modeling
- + Pushed RA to use newer tech Bayesian Networks for anomaly detection

Additional Activities

- + Patent Contributor: *Smith et al.* 2021. Control of Combustion Source with At Least One Pollution Device. U.S. Patent 10,954,843, filed Aug. 24, 2018 and issued Mar. 23, 2021.
- + Taught week-long Customer Product Trainings, participant in Trade Shows

EDUCATION

University of Texas at Austin 2013-2015

M.S. Chemical Engineering

VR Heng et al. Energy-Oriented Modeling and Optimization of a Heat Treating Furnace. *J. Dyn. Sys., Meas., Control.* 139(6), 2017.

Fall 2014 - Teaching Assistant of the Semester Chemical Engineering Dept.

UCLA

2009-2013

B.S. Chemical Engineering

VR Heng et al. Communication: Direct Determination of Triple-Point Coexistence Through Cell Model Simulation. *Journal of Chemical Physics* 137(14), 2012.