

# Ken Wong

[www.kennethwong.org](http://www.kennethwong.org)

Mechanical Engineer

## Summary

Software: SolidWorks, Inventor, AutoCAD, Catia V5/V6, ToolsTalk, Microsoft Office  
Mechanical: Machine and Fixture Design, Mills, Lathes, CNC, FEA, Welding, Sheet Metal, Assembly Tooling  
Electrical: Data Acquisition, PID Control, Sensors, Motors, Heaters, Batteries  
Education: University of Waterloo, Bachelor of Applied Science, Honors Mechanical Engineering

## Experience



### Staff Manufacturing Engineer, Tesla

2017–Present  
Palo Alto, CA

- Designed equipment and tooling, owning all stages from initial concept and detailed design through procurement, assembly, installation, and production launch
- Responsible for deploying flexible, low volume pilot lines capable of assembling several drive unit variants including 3DU, 4DU, 5DU, Cybertruck, and Semi Drive Axles
- Collaborated with design engineers to resolve DFM, DFA, assembly, and product issues
- Process expertise in fastening, press fitting, leak testing, and hipot testing
- Supported multiple production line launches including Battery Pack, Drive Unit, General Assembly, Supercharger, 4680 Cell, and High Voltage Busbar
- Inventor of an in-house rapid pallet transfer system implemented in production



### Machine Tool Research Intern, University of Waterloo

Spring 2016  
Waterloo, ON

- Designed and fabricated precision linear servo axis using linear motors
- Designed flexures to emulate large scale machine tools and induce chatter vibrations at specific frequencies



### Powertrain Manufacturing Intern, Tesla

Fall 2015  
Fremont, CA

- Designed 25-100kN press stations with automatic tool changing, automated gauges, fixtures, and tooling for drive unit assembly in SolidWorks



### Mechanical Design Intern, Instron

Winter 2015  
Norwood, MA

- Designed, prototyped, and evaluated custom tooling for Universal Testing Systems



### Materials Research Intern, Xerox Research Centre of Canada

Fall 2013  
Toronto, ON

- Automated control and data acquisition for an inkjet printing press with LabVIEW, servo motors, heaters, temperature sensors, and pneumatics



### Mechanical Design Intern, Gypsum Technologies

Winter 2013  
Toronto, ON

- Designed weldments, guarding, and bracketry for drywall production equipment
- Selected motors, chain drives, pneumatic components, and sensors

## Projects



### Smart Fortwo EV Battery Pack

2025  
San Jose, CA

- Acquired a mechanically totaled Smart Fortwo with high-voltage battery failure
- Designed and built a pack with new cooling plates and recycled battery modules
- 3D-scanned components into CAD and modeled the full battery pack in SolidWorks



### 24 Hours of Lemons, #425 Dohn Jeere

2020 - Present  
San Jose, CA

- Built a diesel endurance racecar from a 1997 VW Passat TDI
- Responsible for roll cage fabrication, exhaust, turbocharger integration, drivetrain robustness improvements, telemetry, communications, and driving
- Competed in 11 races across Sonoma, Thunderhill, and Buttonwillow