

# CURRICULUM VITAE – PETER SO, MBA



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Address: Maxlrainstrasse 6, 81541 Munich, Germany

Born 26/12/1987 in San Francisco, CA United States

## MOTIVATION

I seek a product development role at a company operating in the US and Germany. I bring a decade of experience designing custom industrial automation for clients and recently completed an MBA focused on promoting open innovation in robotics. I work equally well leading a team or as an individual contributor and embrace dynamic environments where I can continue to learn. In my next role, I aim to develop products people love with global reach.

## EDUCATION

Technical University of Munich & University of St. Gallen – Executive MBA in Business and IT **July 2022**  
University of California, Berkeley – BS, Mechanical Engineering, and Entrepreneurship Certificate **May 2010**

## RELEVANT HIGHLIGHTS

Management Engineering Team Management (Agile), Define Product Requirements, Manage Customers/Suppliers  
Programming Python, C++, Cloud/IoT Deployment (GCP/AWS/Azure), Industrial Robots, PLC (AB/Mitsubishi/BR)  
Design DFM, CAD (10 years): Solidworks/Autodesk/Onshape, Robot Work Cell, Jigs/Fixtures, Sensor Design  
Prototyping Circuit Design, Web Design (WordPress), 3D Printing, Machining (Mill/Lathe), Arduino (ESP32)

## PROFESSIONAL EXPERIENCE

### **Robotics Expert – Technical University of Munich, Munich, Germany** **Mar 2020-Present**

- Role* Researcher with Prof. Sami Haddadin at the [Munich Institute of Robotics and Machine Intelligence](#) Investigating robot skill development for physical manipulation and human-machine interaction
- Results*
- Developing remote monitoring and automatic classification technologies including an IoT Task Board to benchmark real-world robot platforms over the internet
  - Orchestrating as the founder of the global robotics competition *Robothon – Grand Challenge* awarding over 40,000€ to +100 international robotics developers solving industry challenges in autonomous robotic manipulation in 2021 and 2022.

### **Lead Robot Integration Engineer – Vicarious FPC, Union City, CA** **Oct 2018-Feb 2020**

- Role* Lead transition from robotic research to deployed robot hardware at first customer sites for company's "Robots-as-a-Service" product in warehouse logistics
- Results*
- Recruited and train new deployment team (15 new hires) to support two customer site locations
  - Introduced hardware product development capabilities to the R&D team including CAD Management
  - Built out internal new 21,000sqft manufacturing facility to accelerate product/project development

### **Founder, CTO – Nourish Technology Inc, Richmond, CA** **Oct 2015-April 2018**

- Role* Drive the development for all robotics and hardware for a fully autonomous retail breakfast restaurant Design technical roadmap, recruit engineering team, deliver technical demos for investors
- Results*
- Raised \$3M and recruited team of 6 hardware and software engineers
  - Designed, acquired, and built company headquarters complete with robotic kitchen development lab
  - Built original prototype robotic restaurant to serve sandwiches, and coffees over a webapp

**Controls Engineer (1<sup>st</sup> Employee) – L2F Inc, Fremont, CA** **Nov 2013-Sept 2015**

*Role* Develop high-performance robot work cells for clients to automate processes for consumer electronics, automotive and food companies. Responsible for programming of vision guided robot systems

*Results*

- Championed robot programming for a modular, mobile robot system for machine tending
- Deployed 20 robot systems across ten customer pilot lines in overseas factory in Shanghai, China
- Led project for high speed, vision-guided, pick and place robot work cell for solar manufacturing line

**Project Lead Engineer – CKC Engineering, LLC, San Francisco, CA** **Oct 2011-Oct 2013**

*Role* Design and deploy turnkey custom manufacturing equipment for medical and pharmaceutical companies. Generate complete engineering turnover packages; oversee fab and assembly of equipment

*Results*

- Designed and delivered ~\$500k in custom manufacturing equipment systems within first year
- Planned and rolled out CAD product data management (PDM) software to manage company assets

**Manufacturing Engineer – Solyndra, LLC, Fremont, CA** **Sept 2010-Sept 2011**

*Role* Lead the continuous improvement efforts of the maintenance team for a chemical vapor deposition CIGS vacuum line. Provide on-call support and troubleshooting for the product translation system

*Results*

- Reduced equipment service time by 40% (from 20hrs/machine average to a single 12hr shift) through 5S standardization, team re-organization, training, and coordination across all shifts

*Awards*

2022 TUM eMBA Alumni “Dr. Christoph Herrlich” Scholar  
 2021 TUM.ai OpenAI GPT-3 Makeathon Recipe Generator, Bosch Smart Appliances  
 2017 IEEE ICRA Best Pitch for Robotics Innovation and Entrepreneurship, Nourish Technology  
 2016 UC Berkeley CITRIS Foundry Startup Accelerator, Nourish Technology  
 2014 Facebook 1<sup>st</sup> Place DataViz Competition with Tableau in data dashboard generation  
 2006 UC Berkeley Alumni Association Leadership Scholar, PG&E Filipino Scholar, Elks MVP Scholar

*Publications*

2022 *A-RIFT: Visual Substitution of Force Feedback for Zero-Cost Interface in Telemanipulation*. IROS  
 2022 *Towards Remote Robotic Competitions: Internet-Connected Task Board and Web Dashboard*  
<https://arxiv.org/abs/2201.09565>  
 2012 *Vortex shedding induced energy harvesting from piezoelectric materials in HVAC flows*. Smart Materials and Structures Vol. 21. DOI:10.1088/0964-1726/21/4/045003

*Invited Talks*

2020 Korea Food Technology Conference *Intro. of Automation in Quick Service Restaurants* Seoul, Korea  
 2009 IAESTE *JUMP Leadership Conference International Work Exchange Programs*, Banja Luka, Bosnia

*Languages* English: ●●● Native      German: ●●○      Mandarin: ●○○

*Certifications*

2015 Certified Solidworks Professional – Dassault Systems  
 2015 Robotics Expert – Robotics Industry Association / A3  
 2015 Machine Vision Expert – Cognex

*Affiliations*

UnternehmerTUM Entrepreneurial Masterclass, Batch 6 – member since 2021  
 TUM.ai - Venture Committee – member since 2021  
 Build.org Volunteer and Industry Mentor – member since 2016  
 Computer History Museum in Mountain View, CA Trained Babbage Machine Operator 2016  
 International Electrical and Electronics Engineers (IEEE) – member since 2012  
 American Society of Mechanical Engineers (ASME) – member since 2012

*Activities* Trumpet Player, Martial Artist, Photographer, Cyclist, Backpacker, SCUBA Diver, Coffee Roaster

*Interests* Sustainable Energy, Manufacturing, Robotics, Education, 3D Printing, Circular Economy, AI/ML