Jieh Meinhold

EDUCATION

Master of Science, Mechanical Engineering

UCLA (2018-present) Expected: June 2019 GPA: 3.5

Bachelor of Science, Mechanical Engineering

UC Davis (2014-2018) GPA: 3.63

WORK EXPERIENCE AND INTERNSHIPS

Engineering intern: Karl Storz Imaging (Medical Devices) Summer of 2018

- Component inspection/verification fixture design

- Design for manufacturing
- New manufacturing technology feasibility analysis
- Manufacturing drawing creation

Engineering intern: Asylum Research (Atomic Force Microscopy)

Summers of 2014, 2015, 2016 & 2017

- SolidWorks FEA simulations and characterization of microcantilever vibrational properties
- Research into describing higher modal stiffnesses of AFM probes
- Matlab data analysis
- Mechanical design and prototyping

CAD modeler: Spectradyne (Nanoparticle Analysis)

December 2015 - April 2016

- Mechanical design and solid modeling of instrument mechanisms/parts
- Assembly and machining

Engineering intern: Anasys Instruments (Atomic Force Microscopy) Summer of 2013

- Solidworks component design and drawing creation
- Design and prototyping of climate regulated AFM enclosure

Undergraduate research assistant: UC Davis

March 2016- March 2018 (Manufacturing research lab)

- Research on abrasive manufacturing with an emphasis on manual operations and surface roughness characterization

November 2017- March 2018 (MEMS lab)

Research on frequency response of ultrasonic micromachined transducer (PMUT)

PUBLICATIONS

Labuda, A., Cao, C., Walsh, T., Meinhold, J., Proksch, R., Sun, Y., & Filleter, T. (2018). Static and dynamic calibration of torsional spring constants of cantilevers. Review of Scientific Instruments, 89(9), 093701. doi:10.1063/1.5045679

Labuda, A., Kocun, M., Lysy, M., Walsh, T., Meinhold, J., Proksch, T., . . . Proksch, R. (2016). Calibration of higher eigenmodes of cantilevers. Review of Scientific Instruments, 87(7), 073705. doi:10.1063/1.4955122

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SKILLS

- SolidWorks (modeling & FEA simulation)
- Matlab
- Fixture design
- Tolerance analysis
- GD&T experience
- Prototyping
- Machining
- Steel heat treating
- Metalworking/Smithing

OTHER EXPERIENCE/PROJECTS

Automatic Screw Feeder

Working prototype designed, built, and delivered to sponsor for capstone project at UC Davis (2018)

Modular Belt Grinder

Designed and built heavy duty modular belt grinder

Blacksmithing/Knifemaking

http://meinholdknives.com/ (2008-present)

UCSB Cosmology Lab

Mechanical design, CAD and machining (2013)

AWARDS/ACCOMPLISHMENTS

Graduation with honors (UCD)

Engineering Dean's List (UCD)

FIRST Robotics World Championships (2014)