

Hannah Kawai Sanchez

California Based

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TECHNICAL EXPERIENCE

Roche Diagnostics — January 2025 - Present

Field Service Engineer - Tissue Diagnostics - Western USA, Hybrid

- Project manager of \$80M preventative maintenance service program, spanning 40 customer sites in 7 western states; solo recurring travel
- Primary contact and technical resource to hospital and laboratory clients; customer facing excellence improves client relations and company trust
- Directly performs root cause investigation and corrective action of pneumatic and electronic systems, full-system troubleshooting, proactive repairs and validation testing; protocol enhancement feedback to 25,000 national team members
- Selected for engineering promotion and relocation (SLC, UT) to fulfill emerging client market demands

UC San Diego Biomedical Research — June 2021 - August 2021

Research Assistant - Genetic Mutation and Wound Healing - San Diego, CA

- Contributed in \$200K cellular research project by calculating tissue regeneration behaviors in Matlab, ultimately supporting targeted mitochondrial gene therapy
- Presented results to stakeholders to explain correlation between pathogenic mutations and impaired cellular and metabolic efficiency, observed as wound healing velocity in mouse tissue samples
- Concluded that CMT2B mutation results in 19% decreased mitochondrial distribution and 46% slower healing, versus healthy control

ONEX RF Automation — June 2019 - August 2019

Manufacturing Intern - Catheter Manufacturing Solutions - Duarte, CA

- Represented company at Medical Design & Manufacturing (MD&M) convention to showcase new catheter tipping fabrication product line
- Leveraged client demand forecasting to optimize inventory planning and align supply with future production requirements
- Streamlined the development of medical equipment for industry showrooms, upholding quality control and exceeding deadline expectations
- Improved system reliability for programmed laser engraving for fabricated aluminum components, reducing user errors and downtime

EDUCATION

Cornell University — August 2020 - May 2024

Bachelor's of Science, Biomedical Engineering Major - Ithaca, NY

Biomechanics and Mechanobiology Concentration, Mechanical Eng. Minor

- Mastered and applied computational engineering foundations to fuse multiple disciplines for novel applications

Sanguitech Hemostatic Clip — Senior Design Project

Universal Vascular Clip for Hemostatic Control and Damage Reduction in Surgery

- Led a group of 5 peers in medical device invention by driving planning sessions, executing tasks, and surpassing milestones within project timelines, resulting in patent-pending designs and recognition by use-case physicians
- Constructed V&V testing chambers to investigate composite material properties
- Spearheaded use-case simulations in ANSYS and prototype design iterations in Fusion 360 to introduce rapid scaled prototyping, manufacturing decisions, and proof of concept towards project goals

SKILLS

Biological: Implementing Fusion 360 and 3D printing in biomimicry project; Proficient in biomechanical tissue composite analysis;

Biohazard level 2 laboratory certified

Mechanical: Engineer's intuition; Perspective in new product design considering intuitive user interface and service accessibility; ANSYS, Physics

Electrical: Experienced with benchtop equipment e.g. oscilloscope, power supply, piezoelectric sensors; Signal filtering and Fourier analysis

Professional: Self motivated; Leadership initiative; Competence in project management; Strong written and oral communication; Detailed execution

Extracurricular Projects:

Independently operated online retail

Personal: Competitive Varsity Rowing: 40+ career wins in state to national regattas; 10ks and Half Marathons

CERTIFICATES

Nvidia - "Generative AI LLM Development"

IBM - "AI Developer Series"

Stanford University - "AI in Healthcare"

LANGUAGES

English: Native, Fluent

Portuguese: Intermediate

Japanese: Intermediate