

OBJECTIVE	Seeking a challenging and rewarding opportunity in the field of New Product Introduction		
EDUCATION	B.S. in Mechanical Engineering San José State University, San José, CA Graduated: May 2014 Focus: Mechatronics Engineering		
RELATED	Charm Industrial,	Denver, CO	
	Development Engineering Manager	January 2023 - Present	
	Functioned as a key leader on the engineering team tasked with bringing up a new Research and Development team and facility located in Colorado. Led the efforts for commissioning and redesigning new off-the-shelf pyrolysis machines used to accelerate the engineering team’s testing cadence. Provided direction and implementation of building out a brand new facility that is a critical expansion of the company's engineering bandwidth and resources. Built out a team whose primary responsibility is designing low carbon impact biomass preparation systems and processes. Provided engineering leadership in developing strategies for defining a product roadmap to meet key business objectives in the direct carbon dioxide removal space.		
	Tortuga AgTech,	Denver, CO	
	Mechanical Team Lead	November 2019 - December 2022	
	Provided leadership and management of the mechanical engineering team responsible for the design of a fruit harvesting robot. Managed the mechanical engineering team to ensure the completion of critical design work in a timely manner. Worked with the Director of Hardware to define longer term goals and the required timeline/resources needed to achieve those goals. Broke down all weekly goals and priorities with the direct reports to provide them clear guidance on how to achieve the company's higher level goals. Identified when larger cross-functional discussions are required to ensure the direct reports design fully effective systems. Provided feedback to the Director of Hardware when additional resources were needed in order to achieve our highest priority tasks. Drove the efforts to create systems that ensured our design professionalism, such as PLM, PDM as well as other “best practices” documentation. Held weekly one-on-ones with the direct reports to help them with their individual growth paths to enrich their skillsets. Took on large initiatives necessary for scaling company growth such as leading efforts to take designs from prototype to full scale production.		
	Senior Mechanical Engineer		
	Owned the design of arm and end effector assemblies of the fruit harvesting robot through all aspects of the product life-cycle. Designed a new and novel cutting and gripping end effector for the strawberry harvesting robot. The end effector has become a critical aspect to the companies intellectual property and is moving forward through the patent process. Successfully redesigned and adapted the current strawberry robot hardware into a grape harvesting configuration in under one month. Developed a manufacturing strategy with the Director of Hardware to ensure we could ramp up production of the robots from 15 prototype units to a production run of 100 robots. Sourced, negotiated and down-selected a Contract Manufacturer to perform assembly of four large subassemblies of the robot. Performed on-site training of the Contract Manufacturer in order to ensure a quick and seamless ramp up into production. Assisted in the hiring and training of a		

Senior Manufacturing Engineer in order to pass off the day-to-day manufacturing responsibilities so that I could focus on Hardware R&D. Performed on farm testing and support of robots including a month long deployment to England for extended testing. Worked with the Director of Hardware to define requirements and develop architecture of the next fruit harvesting robot design. Developed and down-selected concepts for four of the six major subsystems of the robot.

Creator Inc.

San Francisco, CA

Senior Mechanical Engineer

January 2018 – November 2019

Designed, prototyped, fabricated and tested a wide range of mechatronic solutions used in the automation of food production. Used knowledge of the systems engineering approach to re-evaluate technologies on the machine and to further explore different architectures. Synthesized and generated requirements in a relatively undefined space where the nature of the project could be ambiguous or not well documented in industry. Coordinated efforts in a multidisciplinary team in order to ensure project timeline goals were met. Worked closely in the selection of contractors. Lead the efforts to define scopes of work as well as worked closely with them throughout projects in order to ensure the efforts yielded useful results. Worked directly with a wide range of suppliers including food product suppliers in order to ensure we develop a good relationship with critical suppliers.

Aperia Technologies

June 2016 – January 2018

Burlingame, CA

Mechanical Design Engineer

Mass Precision

July 2013 – June 2016

San Jose, CA

Lead Mechanical Engineer

General Atomics ASI

May 2012 – August 2012

Adelanto, CA

Intern III

PATENTS

End effector for harvesting

Issued Aug 9, 2022

US11406060B1

Tray Apparatus

US20200397192A1

Filed Jun 20, 2020

Systems And Methods For Slicing And Dispensing Bread

US20210260784A1

Filed Jun 20, 2018

Box-dispensing apparatus, boxes for use in the box-dispensing apparatus, and methods of using the box-dispensing apparatus

US20210269186A1

Filed Jun 20, 2018

PROJECTS

SJSU Formula SAE

Powertrain Team Lead

SKILLS

SolidWorks, Fusion 360, PDM, FEA, SW Flow Simulation, Pneumatic System Design, Systems Engineering, Highly Proficient Machinist and Fabricator, TIG/MIG Welding, GD&T, PLC Programming, Technical Leadership, Engineering Management, Python, Project Management, PLM, ERP, Design for manufacturing, Strong verbal and written skills.