Henry J. Cabral

Senior Engineer, Product Development

Professional Experience

Senior Engineer, Product Development (Contractor) @ Stryker
June 2021 – Present | Mahwah, NJ

→ Utilizes PTC Creo to produce surgical templates
→ Evaluates fit-for-use testing, conducts mechanical verification (transit/drop-vibration) testing, and user validation activities related to cases and trays
→ Collaborates with internal stakeholders to ensure requirements outlined in engineering drawings are met

Mechanical/Automation Engineer, R&D @ Aprecia
February 2019 – June 2021 | East Windsor, NJ

→ Led 3DP R&D automated dosing and agitation equipment development and implementation Successfully developed the next generation of automated pharmaceutical 3D printer capable of producing 10,000 custom sized tablets per day
→ Sourced/designed automated instruments (actuators, cylinders, infrared sensors, pneumatics, etc.) for R&D Manufacturing and Formulation
→ Developed key infrastructure for Next-Generation 3DP cGMP Pharmaceutical Manufacturing Equipment
→ Generated/Performed URS, FAT and SAT protocols for cGMP pharmaceutical manufacturing equipment
→ Completed validation activities for two pharmaceutical 3D Printers that were used in production
→ Built and maintained PLC code for Product Development software primarily usingLadder Logic
→ Awarded patent for application in forming a dosage form within a blister packaging. Filing second patent

Production Engineer @ Getinge
January 2018 – February 2019 | Wayne, NJ

→ Executed/Coordinated Validation efforts for several cGMP manufacturing processes within two product lines(HemoPro and HemoPro 2)
→ Authored test protocols/reports for process validations (IQ, OQ, PQ, DesignVerification)
→ Established and modified existing/new SOPs for manufacturing processes
→ Conducted Normality Testing, Process Capability Analysis for OQ/PQ Validation Efforts analysis using Minitab
→ Provided on-demand process equipment (on-the-floor engineering) support

Project Engineer @ Upstart
September 2016 – January 2018 | Newark, NJ

→ Created device housing and tooling using Solidworks which was implemented into device
→ Advanced a marketable device suitable of relieving muscle fatigue for orthopedic surgeons
→ Used voice of customer to ensure that product met design specifications and intended use
→ Maintained relationship with suppliers to produce components essential to design requirements

Skills

Engineering Design & Tools
Design Controls, 3D Printing, Process Validation, Regulations (21 CFR 820, QSR, cGMP, ISO 13485), Mechanical Design, Product Development, Solidworks, PTC Creo, Machining, Minitab

Programming Languages
C++, Python, JavaScript (ES6), TypeScript, HTML/CSS

Libraries & Frameworks
React, Gatsby, Node.js, Express

Tools & Platforms Used
Git, Webpack, Netlify, Heroku, Firebase

Certifications

Zero To Mastery Academy
Complete Python Developer in 2021
Finished in Oct 2020
Complete Web Developer in 2021
Finished in Feb 2021
JavaScript: The Advanced Concepts
Finished in Feb 2021
TypeScript Concepts
In-Progress
Complete React Developer in 2021
Finished in April 2021
Complete Machine Learning and Data Science
Finished in Nov 2020
Complete Node.js Developer
In-Progress

Education

New Jersey Institute of Technology
Bachelor of Science in Biomedical Engineering
2013 – 2017 | Newark, NJ
Master of Science in Biomedical Engineering
2017 – 2018 | Newark, NJ