N COLTEN PALKON

coltenpalkon@gmail.com | (708) 341-5588 | LinkedIn

EDUCATION

Georgia Institute of Technology/ Emory University – *Atlanta, Georgia*
Bachelor of Science in Biomedical Engineering

- University Honors Program mentor
- Club baseball veteran
- Honors: University Honors Program, Highest Honors
- Research Rookies

TECHNICAL SKILLS SUMMARY

Programming Languages: C/C++, Python, R, Microsoft 365 Suite, Google Suite, MATLAB, PLC Programming

Engineering Software: AutoCAD, Inventor, Revit, SolidWorks, Fusion 360, 3D Printing

Data base proficiency: SAP, ETQ Alliance, Excel

Robotics / Automation: Palletizing Robot, Dispensing line verification, Tamper evident label sensing and Application

WORK EXPERIENCE

Promega Product Finishing- *Fitchburg, WI* May 2023- January 2024
Continuous Improvements Intern

- Researched and connected with various companies to plan financial acquisitions and implementation of various equipment and machines including: Tamper evident seal application machines, Palletizing robots, Automatic label application, AI camera and UV sensors, Print finishing, Torque test, and Cartridge counting systems, Dispensing automation
- 3D designed and CNC machined spare bottle clamping mechanisms, and mounting brackets

Promega Instrumentation – *Fitchburg, WI* June 2022 – December 2022
Biomedical Engineering / Manufacturing Engineering Intern

- Utilized SAP to obtain instructions and post finalized products after assembling instruments
- Drafted and 3D printed an improved array baseplate that resulted in a 70% rigidity increase
- Researched different vendors to purchase parts in bulk. This allowed both costs and assembly time to decrease by 10%

IBT Consultants – West Haven, CT May 2021 - August 2021
Electromechanical Technician

- Followed mechanical blueprints and electrical schematics to assemble and wire a PFAS testing apparatus
- Assisted the controls engineer with programing the HMI and PLC
- Developed a plan with other technicians that yielded results within two days to reduce assembly time by 20%

LEADERSHIP ACTIVITIES

Eagle Scout | Boy Scout Troop 385 March 2013 - September 2021

- Conceptualized personal community service project, lead 15 volunteers over the course of 3 months in the design, construction, and installation of convertible bench/tables for church pavilion

HONORS & AWARDS

- Ari and Ruth Kovacevich Distinguished Scholarship recipient August 2022
- Mid-West Fastener Association Scholarship recipient November 2024
- Honors Award for 95% or higher Science GPA all 4 years May 2021

Additional CV
Relevant Coursework

Biomedical Engineering Capstone/ Biomedical Engineering Design: Patent searches and additional research performed on ERCP duodenoscopes as well as possible drug treatments applied into papilla Vater to allow surgeons easier access into both bile and pancreatic ducts. This experience enhanced my knowledge on the entire process from product ideation, validation testing and what it takes to bring a product to market.

Translation Microsystems:
Here the process of creating microsystems and learning about the current capabilities of modern technology was the focus. This background was then enhanced by analyzing cutting edge research papers and presenting good summaries of the background, significance, innovation, and results to other academics who were not familiar with the specifics.

Regulatory and Quality Issues in Medical Device Development: Focused on S-ICD device development and regulations for heart arrhythmias. Practice performing Patent searches as well as research on the regulatory aspects of medical process was gained.

Biomedical Quantitative laboratory 2: Focused on cell behavior of DU-145 cell line and proposed and tested a betaine, cisplatin combination treatment using CCk-8 analysis and Flow Cytometry to see synergistic effects and potential cancer treatment. Cell Viability, Oxidative stress and DNA damage were the main attributes investigated, but many others were researched. Learning the background of how cancer treatments can be successful and proposing a possible solution and testing if it works was the valuable insights learned through this lab.

Biotransport: Gaining an understanding of how fluids, heat, and particles behave throughout the natural world was an important step in knowing the capabilities and limitations of what we can create and what maybe overpromises.

Systems Physiology: This gave me the background on the physiology of the body and in combination with the course on cell biology I now have a proficient level of knowledge in the area that allows me to pick up on new things and build on my previous knowledge easer.

Detailed Work Experience:

For one year I focused on biological instrumentation at Promega. During this time I helped launch their Spectrum CE capillary action instrument. This involved learning all the processes that go into bringing a product to market such as change controls, inventory management, product testing, and actually building the instrument. This experience gave me the opportunity to test my skills and learn the nuances involved in the biotechnology industry.

For another year I focused on the operations of Promega's many assays and chemistries. I helped set up and fix automation systems, regulatory logistics, dispensing techniques, and what it takes to process, package, and ship out products to customers. This experience gave me more of an over-arching view as I learned more about the costs involved and where the real money gets made in the space.

A previous year I worked on installing PFAS testing apparatus for water testing. Setting it up, I learned the components needed and what it takes to design, build, and transport equipment across the country.