ADAM CHO

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PROFESSIONAL SUMMARY

Results-driven Mechanical Engineer with 8+ years of experience in project management and problem solving. Expertise in engineering design across diverse industries, including medical devices, structural signage, sheet metal, engineering plastics, additive manufacturing, moulding, and CNC machining. I am now seeking an opportunity that will allow me to deliver innovative solutions and take on impactful projects that exceed expectations.

SKILLS

Project Management	Consistently handle multiple projects weekly, ensuring on-time delivery while minimizing bottlenecks and prioritizing tasks.
Communication	Effectively liaise information between clients, suppliers, employees, and subcontractors, developing strong relationships for project success.
3D CAD modelling	Expert user of Dassault Systèmes SolidWorks, Autodesk Inventor, and PTC Creo, designing complex parts and assemblies with a strong focus on manufacturability.
Process Improvements	Develop and implement efficient workflows, templates, macros/scripts, and software upgrades, resulting in significant time and cost savings.
Data Analysis	Proficient use of Excel for scheduling, engineering calculations, and statistical/tolerance analysis, driving informed decision-making. (Including the use of Visual Basics and Macros)
Software Development	Adept in various coding languages such as HTML / CSS, JavaScript, Bootstrap, JQuery, C, Python, and Visual Basics, with a passion for software development.
Electronics	Proficient in using Microcontrollers and Raspberry Pis with sensors, demonstrating strong aptitude for hardware design and implementation.
Technical Writing	Produce comprehensive, high-quality documentation in highly regulated environments, ensuring compliance with standards.
Other Software	Adobe Photoshop, MS Office, Geomagic Design X ,ANSYS FEA, PDM Vault, Matlab, 3DS Lightyear, E-stage/ Magics and Netfabb.

EDUCATION

2009-2013, BACHELORS OF MECHANICAL ENGINEERING
University of Auckland, New Zealand

EMPLOYMENT SUMMARY

MECHANICAL ENGINEER *- Pfizer [UK]* **OCT 2020 – PRESENT**

As a Mechanical Engineer at the Device Centre of Excellence, I contribute to the world's largest research-based pharmaceutical company by managing the engineering aspects of auto injectors and training pens. Some of my achievements include:

- Led the design of mechanical testing devices with integrated electronics to revolutionize the testing process for design/usability studies.
- Communicated technical ideas, investigations, strategies, and outcomes effectively to various stakeholders through comprehensive reports, talks and presentations.
- Technical statistical analysis using RSS and Monte Carlo methods to uncover critical insights to inform product design.
- Played a pivotal role in a new stock system software upgrade by testing and training staff, resulting in a significant increase in operational efficiency.
- Maintained accurate and up-to-date records of drawing files as the technical administrator of the database.
- Utilized advanced tools and technologies such as high-speed cameras, Instron force testing equipment, 3D printers, and 3D scanners to drive successful project outcomes.
- Ensured compliance with following ISO 13485 and designing devices around ISO 11608 supporting and leading multiple engineering projects.

MECHANICAL DESIGN ENGINEER *- Rapiscan Systems [UK] (6 months contract)* **OCT 2019 – APR 2020**

As a Mechanical Design Engineer for a security equipment and systems manufacturer, I accomplished the following:

- Created large assemblies and detailed drawings for a new Explosive Detection System (EDS) machine
- Executed improvement/cost reduction design projects for the existing RTT110 EDS machine.
- Developed a new engineering drawing template for use by all engineers.
- Reviewed engineering drawings and developed VB/iLogic macros to increase efficiency.
- Contributed to the development of an upgraded Explosive Detection System (EDS) machine and protective shrouds for conveyor systems

DESIGN ENGINEER *- MAG Assembly [NZ]* **OCT 2017 – AUG 2019**

As a Design Engineer for one of New Zealand's largest wholesale signage manufacturing companies, I managed the engineering design and production of custom signage projects, including:

- Design and management for the national roll-outs of Mitsubishi pylons.
- Analysis of wind loading in signs using SolidWorks FEA simulations and excel calculators.
- Management of outsourced processes, including laser/plasma/water jet cutting, hot dip galvanising, and powder coating.
- Creation of design manuals and templates to assist mechanical engineers.
- Use of a variety of materials when designing, such as foam PVC, steel, aluminium, ACM, and plastics.
- Contributed to projects such as bespoke structural LED digital displays, illuminated signage, pylon signs, high-rise building signs

DESIGN ENGINEER *- Anglo Engineering [NZ]* **OCT 2016 – OCT 2017**

As a Design Engineer for an innovative sheet metal fabrication company, I managed the production of low to high volume metal fabricated designs from concept to production. Some of my notable contributions include:

- Project management, cost estimation, client collaboration, production scheduling, and quality assurance.
- Sheet metal design on PTC Creo and cncKAD: CAD models, BOMs and production drawings.
- Design for Manufacturing and Assembly (DFMA) with sheet metal works and fabrication methods.
- Improved costing accuracy: created a new quotation template
- Create seismic-rated battery stands in accordance with NZS4219:2009 producer statement standards.
- Gained understanding of CNC lasers, CNC punches, press brakes and welding (MIG and TIG).
- Contributed to projects such as traffic stands, transformer enclosures, electronic cabinets and seismic-rated battery stands.

PRODUCTION MANAGER *- Precision 3D Printing [NZ]* **OCT 2014 – APR 2016**

As a Production Manager for the pioneers of industrial-grade 3D printing in NZ, I led a team in ensuring the highest quality products were supplied to design firms across the country. My responsibilities included:

- Overseeing a team of four employees and managing 11 industrial-grade 3D additive printing machines.
- Planning and monitoring daily schedules, which entailed more than 300 machine hours each week.
- Provide operational and technical training to employees to enhance their skills and knowledge.
- Implementing new systems and software that reduced processing time by three hours per day.
- Represented the company at trade shows held in Melbourne, Auckland, and Christchurch.
- Gained familiarity with a range of technologies, including additive manufacturing, vacuum casting, CNC mills, and lathes.

EXTERNAL SALES ENGINEER *- LEP Engineering Plastics [NZ]* **NOV 2013 – OCT 2014**

As an External Sales Engineer for the largest polyurethane casting company and Engineering Plastics fabricators in New Zealand, I demonstrated my ability to:

- Coordinate projects, create quotes, and hold customer consultations, management of over 50 client accounts.
- Design components and moulds using Design X and SolidWorks.
- Utilized the blue light 3D scanner (Rexcan CS+) for product redesign and reverse engineering.
- Generate monthly sales of over $30,000 for the company.
- Gain expertise in various manufacturing processes like CNC machining, polyurethane moulding, plastic fabrication, and injection moulding, enabling me to provide effective solutions to clients.