

T s z F u n g C h a n

Mechanical Designer

+1 437-988-5304 • tfchanag1997@outlook.com

<https://linkedin.com/in/richie-chan-12a3ab212> • <https://asyoufish.github.io>

About Me

As an experienced Mechanical Designer with 2 years of experience in MEP design for buildings, I have a strong background in designing mechanical systems (HVAC, Plumbing & Drainage, Fire Protection) for high-rise residential, entertainment and hotel projects. I am skilled in project coordination, Revit BIM MEP, AutoCAD 2D drafting, on-site coordination and inspection. I am eager to further develop my skills and knowledge and transition into a professional engineering role. I am excited to contribute my expertise to new and challenging projects.

Skills

Building Service (Plumbing & Drainage, HVAC) | AutoCAD (Autodesk Certificate) | Revit MEP BIM (Autodesk Certificate) | Coordination | Technical Communication | Programming | Microsoft Office | Excel (VBA)

Experience

2020 - 2021

Assistant Mechanical Engineer

Aurecon (Hong Kong) Ltd.

- Successfully managed and delivered three concurrent projects, utilizing exceptional multitasking skills, able to work in a fast-paced environment.
- Excelled at technical communication by regularly attending design meetings with clients and presenting complex HVAC, plumbing & drainage, and fire protection designs clearly and concisely. Ensured compliance with regulations and codes of practice.
- Coordinated design efforts with cross-functional teams, leveraging strong technical communication skills to ensure the design complies with regulations and code of practice.
- Demonstrated expertise in plumbing and drainage system design by performing detailed energy and design calculations to ensure the system met regulatory and code requirements.
- Demonstrated the ability to work effectively under pressure by completing the government documentation and submission process in just one week, ensuring compliance with all regulations.
- Successfully designed plumbing & drainage systems using 2D AutoCAD, while meeting a tight schedule.
- Coordinated the completion of tender specifications and drawings within a tight four-month timeframe, collaborating effectively with cross-functional teams and client.

2019 - 2020

Assistant Building Service Engineer

Hip Hing Construction Company Limited

- Coordinated on-site activities with precision and efficiency, overseeing E&M installations and managing sub-contractors and workers to ensure high-quality project delivery.
- Maintained accurate and detailed documentation of installation progress, inspection results, and testing records, ensuring compliance with all regulations and requirements.
- Supervised and inspect the installation of HVAC, plumbing & drainage and electrical system installations.

Education

2021-2023

Diploma in Computer Programming

Sheridan College, ON, Canada

Key courses: *Object Oriented Program Java, Project Management*

2015-2019

Bachelor of Engineering in Mechanical Engineering

The Hong Kong University of Science and Technology, Hong Kong

Key courses: *Control Principles, Mechatronic Design and Prototyping, Design and Manufacturing, Thermodynamics, Fluid Mechanics, Heat Transfer*

Projects

Tonkin Street / Fuk Wing Street Residential Building

- Demonstrated leadership skills as a project coordinator, guiding the design team to complete 75% of the tender phase under the supervision of the project manager.
- Excelled at technical communication by regularly attending design meetings with clients and presenting complex HVAC, plumbing & drainage, and fire protection designs clearly and concisely. Ensured compliance with regulations and codes of practice.
- Played a critical role in project success by efficiently managing multiple government and client document submissions within a tight deadline.
- Coordinated the development of a mechanical BIM model by integrating 2D AutoCAD drawings with structural and architectural designs.
- Demonstrated expertise in plumbing and drainage system design by performing detailed energy and design calculations to ensure the system met regulatory and code requirements.
- Coordinated the completion of tender specifications and drawings within a tight four-month timeframe, collaborating effectively with cross-functional teams and client.

128 Waterloo Road Residential Building

- Revised the residential building's plumbing and drainage system and plant rooms according to site conditions while using 2D AutoCAD.
- Solved complex freshwater lead-in connection issues by conducting site visits and coordinating closely with the government's Water Supplies Department, leveraging strong problem-solving and communication skills.
- Overcame a significant challenge by designing the last manholes connecting to the public manholes, which required building a manhole close to a heritage building and under one of the busiest streets, ultimately securing government approval.

Macau Galaxy Hotel Phase 3

- Successfully designed plumbing and drainage systems for hotel rooms, shopping plaza (w/ F&B), performance hall, plant rooms, open landscape areas and casino areas using 2D AutoCAD, while meeting a tight schedule.
- Demonstrated problem-solving skills by successfully reducing plumbing and drainage pipes to a minimum, meeting the client's casino interior requirements.
- Coordinated with a civil drainage engineer to meet design requirements and ensure that all work complied with relevant codes of practice for both parties