

# Richie Chan

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## **Professional Experience**

Mar 2020 - May 2021

### **Assistant Mechanical Engineer - Aurecon**

- Successfully managed and delivered 3 concurrent projects (2 residential and 1 entertainment), utilizing exceptional multitasking skills, and being able to work in a fast-paced environment.
- Achieved timely submission of drainage design drawings to the government's building department within one week, obtaining initial approval after only 2 rounds of revisions.
- Excelled at technical communication by regularly attending design meetings 2 times a week with clients and presenting complex MEP designs clearly and concisely.
- Utilized Revit software to transfer 2D designs into 3D models and presented the design concepts to clients.
- Successfully completed the plumbing & drainage design calculation report and drawings within a tight one-month deadline for client approval.
- Consistently designed and reviewed plumbing and drainage systems using AutoCAD, meeting all project requirements and completing revisions within just 3 days.
- Coordinated the completion of tender specifications and drawings within a tight 4 months timeframe, collaborating effectively with cross-functional teams and clients.

July 2019 - Mar 2020

### **Assistant Building Service Engineer - Hip Hing Construction Company Limited**

- Coordinated on-site activities with precision and efficiency, overseeing MEP 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:** *Project Management, Object Oriented Program Java*

2015-2019

### **Bachelor of Engineering in Mechanical Engineering**

The Hong Kong University of Science and Technology, Hong Kong

**Key courses:** *Thermodynamics, Fluid Mechanics, Heat Transfer, Control Principles, Design and Manufacturing, Electrical Technology*

## **Skills**

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

## **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 attending design meetings with clients 2 times a week 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 drawings with structural and architectural designs.
- Created precise plumbing and drainage schematics, layouts, and detailed drawings using AutoCAD to ensure accurate implementation of 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 clients.
- Successfully coordinated with multiple utility companies to facilitate the rerouting of existing services beneath the building within a tight deadline of two months
- Successfully designed plumbing and drainage systems for Modular Integrated Construction (MiC) units, utilizing flex joints in the design.

### **128 Waterloo Road Residential Building**

- Revised the residential building's plumbing and drainage system and plant rooms according to site conditions while using AutoCAD.
- Solved complex freshwater lead-in connection issues by conducting site visits and coordinating closely with the government's Water Supplies Department in 4 weeks, 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 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.
- Collaborated with a civil drainage engineer to finalize the design of civil and MEP drainage connections in the open landscape area. Ensured compliance with relevant codes of practice for both parties, completed the design within 2 weeks