# Joseph Watson

1/F, No.30, Yue Kok Tsuen Tai Po Hong kong

(852) 5541 8371 joseph.w.m.watson@gmail.com josephwmwatson.com LinkedIn - Joseph Watson

#### INTRODUCTION

I am Joseph Watson, I am a **CAD engineer**. I have extensive experience working in the **robotics industry**, and I have worked with several **robotics companies** and **consumer electronics companies** to **design**, **assemble**, and **test** a range of complex **mechanical** products. I am a self-motivated, technically-minded individual with proficiency in a **very wide range of engineering and design softwares**, and I am constantly searching for new ways to improve and innovate, and constantly keeping my CAD skills and knowledge up-to-date.

#### **EXPERIENCE**

#### Audio-Technica (Greater China) Limited - Senior CAD Engineer

November 2023 - October 2024

 Worked in Product Development and Design for Manufacturing for Audio Technica, handling microphone and headphone Design and Production, including creating manufacturing technical documentation in Chinese and English, and working closely and on-site with Mainland Chinese factories for mass manufacturing, production and assembly of audio products and components. Job duties also included Handling First Article Inspections and Quality Control procedures.

#### Lam Gwong Design Company Ultd. - Senior CAD Engineer, owner

Founded in July 2020

- Freelance CAD engineering services, and 3D modeling.
- I have done CAD engineering for several robotics companies designing mechanical systems and components for manufacturing, as well as working with several consumer electronics companies.

#### Hanson Robotics Ltd. - CAD Engineer (Mechanical Engineer)

Client

- Designed and assembled a wide range of **robotics assemblies** and **injection molds** for the use in their **commercial robotics products**.
- Select suitable materials and manufacturing processes for components for optimal performance and cost optimization.

#### SKILLS

#### SOFTWARE

Solidworks Geomagic Unreal Engine Unity Blender Z-Brush Fusion Rhino KeyShot Cinema 4D Houdini Maya Slicer Medical Ansys Ein-Scan

#### GENERAL

- CAD Engineering
- CAD Design

Product Design

Production and Manufacturing

Prototyping

Product Rendering

### JC Collections Ltd. - CAD Engineer (Mechanical Engineer)

#### Client

• Designed and produced various motorized scale models for iconic historical military aircrafts, and vintage film characters, for mass manufacturing to be sold on the market as consumer products for model-making enthusiasts and Hobbyists.

#### Cordex Ltd. - 3D modeler

#### Client

- Created detailed **3D models** of several aircrafts and related gears and equipment with high-resolution texture maps and animation libraries.
- Used in educational AR/VR applications.

#### Art Roof Top Ltd. - CAD Engineer (Mechanical Engineer)

#### Client

- Created and installed **large-scale mechanical assemblies** Complex corporate art pieces on display in several large corporations throughout hong kong.
- Installation spaces include the Adidas corporate headquarters, and Delta aluminum corporate headquarters.

## Artech Design and Production Company Ltd. - CAD Engineer & 3D modeler

#### Client

- Designed and built multiple **animatronic robots** for use in research, and for commercial use in the theme park industry.
- Conducted Performance and lifetime assessment and optimization for robotic assemblies.

#### Freelance CAD Design, Hong Kong/ United States — CAD Designer

October 2019 - February 2020

• Worked on multiple **CAD design** projects for Hong Kong, US, and China based clients, including design for many **injection molded plastics**, **CNC milled metal parts**, and digital character sculptures.

# Hanson Robotics, Hong Kong/ United States — Senior Robotics Engineer

January 2016 - September 2019

- Led the CAD design for the head and neck of several humanoid robots including the world-famous robot "Sophia"
- My duties included **full design**, **assembly**, **and testing** of robotic characters.
- creating physics simulations of heat dissipation, airflow,

Extensive Unreal Engine experience

Game Design

AR/VR Interactive Design

Real-Time Rendering

Cycle-Based Rendering

3D Modeling

Animation

Rigging

Simulation

UV mapping and Texturing

Mold Design

Tool Design

NURBS Surfacing

Medical Scan 3D Reconstruction

**FEM Analysis** 

**Figure Drawing** 

Sculpting

3d Scanning / Processing

**Raster Mapping** 

#### LANGUAGES

English, Cantonese, Spanish

and **injected plastics flow**.

- Creating assembly instructions for outsourced assembly tasks.
- conducting **time and motion studies** for assembly tasks.
- **Communication with Chinese manufacturers** to coordinate the production of parts.
- I Spent a portion of my time working from Los Angeles in Collaboration with several Hollywood animatronics designers.

# Hanson Robotics, Hong Kong/ United States — Full-time Paid Internship

August 2015 - December 2015

• Before I became an employee for Hanson Robotics I worked full-time as a paid intern there. My work focused on the design and construction of humanoid robotic prototypes.

### Hensel Phelps Construction, United States — Construction worker

May 2014 - September 2014

• My job duties entailed erecting concrete formwork, erecting rebar, and pouring and demolding concrete structures. The main site I worked at was for the construction of the international wing of the Hobby Airport in Houston, Texas.

#### K3-BMI Oilfield services, United States — Maintenance Worker

May 2013 - March 2014

• As a maintenance worker for an oil field service truck center my job duties entailed warehouse organization, truck painting and maintenance, and forklift operation.

#### EDUCATION

• Chinese University of Hong Kong — Chinese Language studies

January 2021 – November 2022

• Hong Kong Polytechnic University — Biomedical Engineering

August 2017 - May 2018

#### • UT Dallas — Biochemistry

August 2014 - January 2016

• Alvin Community College — Associates Degree (Through

### **EXHIBITIONS**

- Refract@6: West Kowloon Cultural District, 2024
  - Programmed and rigged 3D characters and 3d scenes for live performance at West kowloon Cultural District for the REfract@6Degrees" performance.
- Phygital D: West Kowloon Cultural District, September 2022
  - Programmed and rigged 3D characters for live performance at West kowloon Cultural District for the "Accelerating Dimensions" Performance during the Phygital D Exhibition.
- Hong Kong AAF (Affordable Art Fair) 2019 Spring Exhibition
  - Exhibited and sold artwork at the Hong Kong AAF hosted at WanChai Convention Center in Spring 2019.
- Art Roof Top Ltd. Founding Gallery Member
  - A founding member of Art Roof Top Ltd. Hong Kong based art Gallery in Happy Valley, Hong Kong.
- Shenzhen City Art 2018 Fall Exhibition Exhibitor
  - Exhibited and sold artwork at the Shenzhen City Art Fair in Shenzhen, Fall 2018.
  - Asia Contemporary Art 2017 Fall Exhibition Exhibitor
    - Exhibited and sold artwork at the Asia Contemporary Art Exhibition in Hong Kong, Fall 2017.