



# CHIA, KOK CHEAN

## Data Scientist | Business Owner

Data scientist with 1+ years of broad-based experience in full-cycle data science projects. Proficient in building predictive models to drive decision-making in areas such as fraud claims and carbon emissions. Beyond data science, I've ventured into digital marketing and pursued a passion for fungi cultivation business since 2021.

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✉ kokcheanchia@gmail.com

📍 Penang Malaysia

🌐 [Portfolio Projects](#)

## Relevant Experience

### Data Scientist | 03/2021 – 10/2021

**BMW Group, Munich DE | Industry : ESG**

Aim & Outcome: Identify operational emission hotspots and recommend strategies for reducing carbon footprints.

- Constructed **ARIMA Class, Prophet** models for univ- & multivariate electricity consumption forecasting, integrating **Cholesky decomposition** and **regression techniques** for missing data imputation.
- Designed predictive models accommodating change point events like the Covid lockdown.
- Developed actionable plans, ensuring project completion on schedule within the **Full-Cycle Data Science Project Workflow**.
- **Collaborated across departments and with external partners**, including energy providers, for comprehensive **clean energy data assessment**.
- Conducted a **panel review with industry experts**, focusing on models stability, scenario analysis, cost evaluation, and improvement strategies.

### Research Intern | 11/2016 – 12/2017

**Porsche AG, Weissach DE | Industry : Lubricant**

Aim & Outcome: Classify used engine oil formulations, preventing false claims of engine failures due to unauthorized formulations.

- Deploy **Principle Component (PCA)** and **Canonical Discriminant Analysis (CDA)** to classify used oil formulations, considering dynamic changes in used oil chemistry.
- **Design of Experiment**: Optimize sampling, analytical instrument's running duration, and ensure diverse datasets.
- Developed Solid Phase Extraction (SPE) for **refining sampling procedures**, enhancing signal quality in specific GC spectra as an **input improvement** for the model.
- Z-normalization and data cleaning (SQL) to **optimize standardized scale and computation time**.
- Statistica-R as statistical modeling software.

## Portfolio Projects

Click👉 [Portfolio Projects](#) for details

- **Start-Ups Evaluation | 11/2023**
  - Identify critical factors for startup success by analyzing 54K companies worldwide
  - Random Forest & XG Boost
  - Data analyst vs data scientist workflows
- **NLP Sentiment Analysis | 11/2023**
  - Identifying sentiment in Amazon reviews: VADER and roBERTa models comparison
  - Aim to automate process in e-commerce business operation: product & improvement ideas, competitor analysis.

## General Skills

Full Cycle Data Science   Statistical Analysis  
Data Storytelling   AI Workflow Integration  
Agile methodology   Business Development  
Cross - Functional Collaboration

## Tech Stack

Python   PyTorch   TensorFlow   scikit-learn  
MS Office Excel   Power BI   SQL  
AWS Service   Scrapy   Selenium

## Business Experience

### LMMJ Global Enterprise, MY

Co- Founder | 2021 – Present

### CKC Biotechnology Enterprise, MY

Founder | 2022 – Present

## Education

### **M. Sc Process & Chemical Engineering**

Karlsruhe Institute of Technology (KIT) DE | 2018–2021

### **B. Sc Process & Environmental Engineering**

Heilbronn University DE | 2014–2017

## Language

Mandarin : Native

English : Professional Working Proficiency

Malay : Professional Working Proficiency

German : Professional Working Proficiency

## Award

2014 | National JPA Scholarship for Bachelor Study in Germany

2018 | National JPA Scholarship for Master Study in Germany

## Referees

Available upon request.

Overall Comment:

- Committed to Project Success
- High Adaptability

## Personal Interest

I am passionate about driving societal progress, much like the motivation behind starting my business. I thrive in collaborative environments, particularly with motivated teams, and seek impactful projects that advance society. My interests lie at the intersection of finance and investment, environmental science, applied science, and engineering. I am also open to exploring other avenues for positive change.

I am eager to connect and contribute to the success of your team. Let's collaborate and work towards making a meaningful impact together.

## Below is the testimonial letter from BMW Group



# Message from BMW Group (Translated Version)

## Testimonial for the Project (BMW Group)

Mr. Kok Chean Chia, born on March 18, 1993, authored his thesis in collaboration with the BMW Group at the Munich site from April 1, 2021, to September 30, 2021, in our department of Technology, Materials, and Process Analytics (TWA) at BMW AG. The thesis was titled "Analysis of Energy- and Resources-Consumption in TWA's Operation in Building 0.95".

During his tenure, Mr. Chia supported us in the following areas:

- Conducted literature research
- Gathered building-related data (machinery, water consumption, heating, ventilation, electricity, industrial gas)
- Understanding resource distribution
- Development of a statistical prediction model for electricity consumption in the building
- Familiarity with and usage of a life cycle assessment software (GaBi)
- Creation of a scalable data-collection workflow for similar-functionality and purpose buildings
- Production of a written thesis

Mr. Chia consistently exhibited the **highest levels of reliability, independence, and trustworthiness in his work**. He demonstrated **great engagement, initiative, and commitment** to his tasks. His work results were consistently of **high quality, even amidst changing requirements and challenging situations**. His **task processing speed always exceeded our expectations**.

He possesses **comprehensive subject knowledge** and a **solid professional competence**. His personal conduct was always impeccable. He was **highly esteemed by superiors, colleagues, and business partners**. Mr. Chia **consistently completed assigned tasks to our utmost satisfaction**.

Upon the completion of the thesis submission deadline, Mr. Chia departed our company on time, much to our regret. We would like to express our gratitude once again for his extremely constructive and valuable contribution as well as the results of his work, which were of great value to us. We wish Mr. Chia all the best and continued success in his future professional and personal endeavors.

**"Translated by ChatGPT"**

## Zeugnis zur Studienabschlussarbeit

Herr Kok Chean Chia, geboren am 18. März 1993, verfasste in der Zeit vom 1. April 2021 bis 30. September 2021 in Zusammenarbeit mit der BMW Group am Standort München seine Abschlussarbeit in unserer Fachabteilung Technologie- Werkstoff- und Verfahrensanalytik (TWA) der BMW AG mit dem Thema "Analysis of Energy- and Resources-Consumption in TWA's Operation in Building 0.95".

Im Rahmen seiner Arbeit unterstützte Herr Chia uns in folgenden Bereichen:

- Literature Research
- Building-related collection of data (machinery, water consumption, heating, ventilation, electricity, industrial gas)
- Understanding the distribution resources
- Developement of an statistical prediction model regarding the electricity consumption in that building
- Understanding of and working with a life cycle assessment software (GaBi)
- Developing a scalable workflow of data-collection for other buildings of similiar functionality and purpose
- Producing a written thesis

Die Arbeitsleistung von Herrn Chia war jederzeit durch höchste Zuverlässigkeit, Selbstständigkeit und Verlässlichkeit geprägt. Er identifizierte sich mit seinen Aufgaben und arbeitete mit sehr viel Engagement und Eigeninitiative. Die Arbeitsergebnisse waren auch bei wechselnden Anforderungen und in schwierigen Fällen stets von guter Qualität. Sein Arbeitstempo bei der Aufgabenbearbeitung lag stets über unseren Erwartungen.

Herr Chia verfügt über umfassende Fachkenntnisse und eine fundierte Fachkompetenz. Sein persönliches Verhalten war stets einwandfrei. Bei Vorgesetzten, Kollegen und Geschäftspartnern war er sehr geschätzt. Herr Chia hat die ihm übertragenen Arbeiten stets zu unserer vollsten Zufriedenheit erledigt.

Nach Ablauf der Bearbeitungsfrist seiner Abschlussarbeit verlässt Herr Chia termingerecht und zu unserem großen Bedauern unser Unternehmen. Wir danken ihm noch einmal für seine sehr konstruktive und gute Mitarbeit sowie die für uns sehr wertvollen Ergebnisse seiner Arbeit. Wir wünschen Herrn Chia auf seinem weiteren Berufs- und Lebensweg alles Gute und weiterhin viel Erfolg.

**Firma**

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Nicolas Peter  
Frank Weber  
Andreas Wendt

**Sitz und****Registergericht**

München HRB 42 243

Beurteilung Zeugnis zur Studienabschlussarbeit  
Empfänger Herr Chia  
Datum 30.09.2021  
Seite 2

Bayerische Motoren Werke Aktiengesellschaft

i. A.

i. A.

Stefan Pfurtscheller  
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Thomas Schromm  
Betreuer  
TI-313

Beurteilung Zeugnis zur Studienabschlussarbeit  
 Empfänger Herr Chia  
 Datum 30.09.2021  
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## Kriterienorientierte Beurteilung

	A	B	C	D	E	F
	Übertrifft die Anforderungen erheblich und zu jeder Zeit	Übertrifft die Anforderungen erheblich	Übertrifft die Anforderungen leicht	entspricht den Anforderungen größtenteils	entspricht den Anforderungen in Teilen, wird als Lernfeld empfohlen	kaum wahrnehmbar, wird als Lernfeld empfohlen
Analytisches Denken	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovationen schaffen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kunden- und Qualitätsorientierung	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Umgang mit Wissen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eigeninitiative zeigen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kommunikationsfähigkeit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teamfähigkeit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Hinweis: Die Reihenfolge der Kriterien stellt keine Priorisierung dar!**