

# Pham Minh Duc

📞 +39 351 642 4666 ✉️ minhducqlcn@gmail.com 🏠 Pisa, Italy  
🌐 [github.com/DucPhamBP](https://github.com/DucPhamBP) 🌐 [ducphampb.github.io](https://ducphampb.github.io)

## Profile

---

I'm currently researching the design of technologies and algorithms that address supply chain challenges in developing and emerging markets, especially informal markets, by combining methods from large-scale fieldwork, optimization, computer science, econometrics & data analytics, and action research in particular in the scenario of Industry 4.0.

## Areas of Expertise

---

Combinatorial Optimization - Stochastic Optimization - Machine Learning - Data Analytics & Modelling - Supply Chain Analytics - Network design & routing - Production Planning & Scheduling - Operation Excellence - Lean & 6 Sigma

## Education

---

- Master in Data Science and Business Informatics** [University of Pisa \(Italy\)](#) 09/2023 - Present  
Relevant Courses: Optimization for Data Science, Model Driven Decisions Making
- Double Degree MSc of Production Engineering and Management** [University of Trieste \(Italy\)](#) 09/2019 - 03/2022  
Relevant Courses: Operation Management, Data Analytics
- Double Degree MSc of Production Engineering and Management** [TH-OWL \(Germany\)](#) 09/2020 - 02/2021  
Activities: Erasmus Plus Exchange Program
- Bachelor in Industrial Management** [HCMC University of Technology and Education \(Vietnam\)](#) 09/2014 - 09/2018

## Professional Experience

---

- Business Analyst, ([Weave Services Limited](#))** **Hongkong (remote)** 06/2022 - 8/2023
- Developed strong analytical capabilities to support business and operational applications, including descriptive analytics, predictive analytics.
  - Redefined the performance measurements for root cause analysis and built data analytics capability to support multi-perspective reporting and intelligent demand planning.
  - Developed S&OP product packages, including sales materials and demo product. Led the deployment of demand planning and capacity planning within the product.
  - Designed and built the algorithm to optimize required capacity, production shift and operator productivity in capacity planning project.
  - Developed Business Intelligence product packages. Developed dashboards to track the performance and perform business/ data analysis tasks for Clients.
  - Reviewed clients' businesses in the supply chain field, enhancing current factory diagnostic and operation excellence.
- Production Data Analyst, ([Spartronics Vietnam](#))** **Binhduong, Vietnam** 02/2021 - 05/2022
- Collected, processed, analyzed the data to get insights and support top leaders making decisions, problem solving and improvements.
  - Designed and built the SMT changeover process for two high-volume PCBA products, reduced setup time by 50% and increased OEE to 82%.
  - Built and deployed 20 standardized SOPs and best-practice frameworks with defined KPIs/PPIs to drive process consistency and ensure output quality across operations.
  - Developed a project that increased the First Pass Yield of Box Build products (21 SKUs) on the Tele-radio line to 98.89%, increased 4.09 sigma level, saved \$35k in 2022 for the company.
- Production Engineer, ([Coherent Corp.](#))** **Binhduong, Vietnam** 12/2017 - 09/2019
- Monitored, analyzed daily data regarding to business goals and took corrective/preventive actions to get them back on track.
  - Made weekly/daily production schedules (200 SKUs) based on master production plans with the right time, quantity, conditions.
  - Failure analysis by applying lean tools (5 whys, 5W1H, 5M1E, FMEA), mathematics techniques (6 Sigma, Reliability analysis, Pareto/SPC analysis, Cpk/Ppk, DOE) to define corrective/preventive actions regarding to quality excursions.
  - Developed a productivity improvement process for a Core-Bedding product (single SKU), reducing average labor time from 0.38 to 0.23 hours per unit and saving \$9,229.29 for the company.

**Teaching Assistant, (HCMUTE)**

**Hochiminh City , Vietnam 09/2016 - 12/2016**

- Studied and solved exercises in Optimization Module, with topics as: Mathematical Programming, Constrained Optimization, Simplex Algorithm, Unconstrained (Linear) Optimization, Decision Analysis.

## Online Courses & Certifications

---

- Certified in Planning and Inventory Management (CPIM) (Sep. 2023) - [APCIS](#)
- Specialization Certificate Six Sigma Green Belt (Jan. 2023) - [The University System of Georgia, Coursera](#)
- Specialization Certificate of Analytics for Decision Makings (Jan. 2022) - [University of Minnesota, Coursera](#)
- Specialization Certificate Supply Chain Management (Nov. 2020) - [Rutgers Business School, Coursera](#)
- Specialization Certificate Project Management Principles and Practices (Oct. 2020) - [University of California, Irvine](#)

## Skills

---

<b>Programming:</b>	Python, AMPL
<b>Databases:</b>	SQL, SSIS, MDX
<b>Statistics:</b>	R, Microsoft Excel, Minitab
<b>Optimization:</b>	CPLEX, Gurobi, HIGHS
<b>Data Visualization:</b>	Microsoft Power BI
<b>Others:</b>	LaTeX

## Languages

---

- |                              |                             |
|------------------------------|-----------------------------|
| • <b>Vietnamese</b> [Native] | • <b>English</b> [Advanced] |
|------------------------------|-----------------------------|

## Honors & Awards

---

- |  |                                     |
|--|-------------------------------------|
| • Intel Product Vietnam Scholarship (2017) | • AmCham Vietnam Scholarship (2017) |
|--|-------------------------------------|

## References

---

- |  |  |
|--|--|
| • <b>Associate Professor. Elio Padoano</b><br>University of Trieste<br>Email: padoano@units.it | • <b>Hoang Quoc Huy</b><br>(Ex.) Senior Manager at Weave Services Limited<br>Email: huy.hoang.ds21@gmail.com |
|--|--|