

# CURRICULUM VITAE

## PERSONAL INFORMATION

**Full Name:** Thang Nguyen  
**Date of Birth:** 17/12/1985  
**Nationality:** Vietnamese, German  
**Gender:** Male  
**Marital Status:** Married, two children

## Contact Information:

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## PROFESSIONAL SUMMARY

Experienced Process Engineer with 16+ years managing international water/wastewater treatment projects ranging from 500 CMD to 19,200 CMD across Germany, Singapore, Turkey, Vietnam, and Japan. Currently specializing in digital process optimization and real-time control systems, developing data-driven solutions that improve operational efficiency by 20-35%. Expert in process design, advanced data analytics, and sustainable water management solutions with proven track record of delivering projects on time and under budget while exceeding environmental performance targets.

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## EDUCATION

### Master of Science in Environmental Engineering

**Institution:** Technical University Munich (TUM), Germany

**Location:** Munich, Germany

**Duration:** 2017 - 2020

**Thesis:** "The effect of enzyme supplementation on the acidogenesis of papermaking process water"

Final GPA: 2.0

**Key Coursework:** Wastewater Treatment Engineering, Process Modeling, Biological Treatment Systems, Advanced Oxidation Processes

**Certificate:** **Aerobic Granular Sludge Technology for Wastewater Treatment**

**Institution:** TU Delft, Netherlands

**Duration:** March 2021

**Focus:** Advanced biological treatment technologies

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## PROFESSIONAL EXPERIENCE

### Process Engineer / Project Manager

**Organisation:** Aqua plus Wasser- und Recyclingsysteme GmbH

**Location:** Böbingen an der Rems, Germany

**Duration:** November 2025 - now

#### Key Responsibilities:

- Design, calculate and drawing Inventor 3D drawings for galvanic wastewater treatment plants.
- Manage schedule, costs and resources of projects.
- Develop database SQL Server for technical and sale departments

### Process Engineer

**Organization:** Aquadata Abwassertechnik GmbH

**Location:** Braunschweig, Germany

**Duration:** November 2022 - November 2025

#### Key Responsibilities:

- Develop real-time controllers (RTC) for wastewater treatment plant optimization using Python, SQL, and advanced data analytics

- Design and implement digital twin technology for treatment plants, improving operational efficiency by 20-35%
- Lead international projects for major engineering consultancies including Jacobs (USA), Veolia (France), Scottish Water, ThamesWater (UK)
- Create automated analysis algorithms and dashboard systems for process monitoring and optimization
- Provide remote commissioning and technical support for global client base

**Key Achievements:**

- Successfully deployed RTCs across 4 countries (USA, France, Germany, UK) for major international clients
- Developed digital twin technology reducing energy consumption by 25-35% in pilot implementations
- Created predictive analytics systems enabling proactive maintenance and optimization strategies
- Established automated reporting systems improving operational decision-making efficiency

**Notable Projects:**

- Wellington WWTP: SND, Swingzone, IRC, RAS, SRT-RTCs for Jacobs, USA
- Sausheim WWTP: MOV-RTC, N/DN, SRT, P-RTCs for Veolia, France
- Kronau WWTP: C, SND, NDND, P-RTCs for Kronau, Germany
- Oxford WWTP: N, SRT-RTCs for ThamesWater, UK

**Process Engineer / Project Manager**

**Organization:** MERI Environmental Solutions GmbH (Voith Group)

**Location:** Munich, Germany

**Duration:** 2017 - 2022

**Key Responsibilities:**

- Led technology selection and concept development for industrial wastewater treatment facilities
- Managed complete project lifecycle from feasibility studies through commissioning for international EPC projects
- Developed P&IDs and equipment specifications using COMOS (Siemens platform) for complex treatment systems
- Supervised installation, commissioning, and Factory Acceptance Testing (FAT) for multiple international projects
- Created control philosophy descriptions and automation strategies for treatment systems

**Key Achievements:**

- Successfully completed 19,200 CMD wastewater treatment facility in Turkey, implementing advanced biological treatment systems
- Managed rainwater reclamation project at Vinakraft Paper Mill, Vietnam, achieving 25% energy reduction through process innovation
- Delivered process water treatment system for ProPapier (Progroup, Germany) on schedule and within budget
- Implemented advanced process control systems reducing operational costs by 15-20%

**Major Projects:**

- SÖKE Project, Turkey (2020-2022): 19,200 CMD - Design P&ID, commissioning supervision
- Rainwater Reclamation, Vinakraft Paper Mill, Vietnam (2018-2019): Process engineering and project management
- White Water Treatment, Vinakraft Paper Mill, Vietnam (2020): Complete system design and implementation

- ProPapier Process Water Treatment, Germany (2019-2020): P&ID design, control philosophy, commissioning
- Stock Preparation System, Hamburger Rieger GmbH, Germany (2019-2020): Logic control testing and commissioning

#### **Process Engineer / Project Manager**

**Organization:** Kobelco Eco-Solutions Ltd. (Kobelco Steel Group)

**Location:** Japan

**Duration:** 2010 - 2016

#### **Key Responsibilities:**

- Executed complete project lifecycle management from conceptual design (Pre-FEED) to detailed engineering (FEED)
- Managed EPC contracts for industrial wastewater treatment facilities across Asia-Pacific region
- Conducted feasibility studies, cost estimation, and technical proposal development
- Led commissioning teams and provided operational training for client personnel
- Developed architectural and fabrication specifications for treatment equipment

#### **Key Achievements:**

- Led 4,550 CMD Water Reclamation project for Singapore PUB, delivered on time and under budget, exceeding performance targets by 12%
- Managed one of Southeast Asia's largest pulp/paper wastewater treatment facilities (13,000 CMD) for SCG Group
- Successfully commissioned multiple industrial treatment plants with zero safety incidents
- Achieved 100% client satisfaction rating across all managed projects

#### **Major Projects:**

- VKPC#2 ETP (SCG Paper), Vietnam (2015-2016): Complete EPC delivery including design and construction management
- PUB Jurong Water Reclamation Plant, Singapore (2013-2014): 4,500 CMD UASB and biogas treatment system
- Denis Group Canning Factory WWTP, Vietnam (2015): 500 CMD complete design and cost control
- Lixil Casting and WWTS Projects, Japan (2014-2015): Operation team management and staff training
- Sapporo WWTP, Japan (2010-2011): 2,000 CMD EPC project delivery

#### **M&E Engineer**

**Organization:** Glowtec Environmental

**Location:** Singapore

**Duration:** 2007 - 2009

#### **Key Responsibilities:**

- Supervised construction site activities and technical project coordination
- Designed piping systems and equipment fabrication specifications
- Conducted quality control and acceptance testing procedures

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### **TECHNICAL SKILLS**

#### **Software & Programming:**

- **COMOS (Siemens)** - Expert: P&ID Development, Equipment Sizing, Logic Diagrams
- **Python** - Advanced: Data analysis, automation, algorithm development
- **SQL Databases** - Advanced: MySQL, PostgreSQL, MariaDB, InfluxDB
- **Process Simulation** - Advanced: SUMO, BioWin, GPS-X (commercial packages)

### Data Analysis & Visualization:

- **Grafana** - Advanced: Real-time monitoring dashboards
- **PowerBI** - Advanced: Business intelligence and reporting
- **Python Libraries** - Advanced: Data analytics and machine learning applications
- **Database Management** - Advanced: Time-series data, process optimization

### Engineering Design Software:

- **AutoCAD 2D** - Advanced: Technical drawings and layouts
- **Inventor 3D** - Intermediate: Technical drawings and layouts
- **MS Project** - Advanced: Project planning and resource management
- **MS Visio** - Advanced: Process flow diagrams and technical documentation

### Industry-Specific Skills:

- Real-time controller (RTC) development and implementation
- Digital twin technology for process optimization
- Advanced process control and automation
- Biological and chemical-physical treatment process design

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## CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

### Professional Certifications:

- **Aerobic Granular Sludge Technology for Wastewater Treatment** - TU Delft, March 2021
- **COMOS Process & Application** - Siemens Platform Certification

### Training & Workshops:

- **Digital Twin Technology** - Advanced implementation methodologies

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## PUBLICATIONS & RESEARCH

### Peer-Reviewed Publications:

1. Nguyen, T. et al. (2025). "Energy efficiency evaluation of a centralised wastewater treatment plant in an industrial zone of Binh Duong province, Vietnam." *Vietnamese Journal of Science, Technology and Engineering*. DOI: [10.31276/vjste.2024.0117](https://doi.org/10.31276/vjste.2024.0117)

### Research Areas:

- Energy efficiency optimization in wastewater treatment systems
- Biological process modelling and control
- Digital transformation in water treatment operations
- Sustainable process engineering for developing economies

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## LANGUAGES

- **Vietnamese:** Native
- **English:** Fluent (C2) - Full professional proficiency in technical and business contexts
- **German:** Professional (B2) - Working proficiency in technical environments

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## ADDITIONAL INFORMATION

### International Experience:

- **Germany** - 6+ years - Process engineering and technology development
- **Singapore** - 3 years - Industrial project management and commissioning
- **Turkey** - 1 year - Large-scale facility implementation and optimization
- **Vietnam** - 9 years - Industrial process design and environmental consulting

### Core Competencies:

- Extensive experience in developing economy infrastructure projects
- Strong background in environmental sustainability and resource optimization

- Proven ability to work effectively across diverse cultural and regulatory environments
- Demonstrated success in technology transfer and capacity building initiatives
- Bilingual technical communication capabilities (English/German)

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## REFERENCES

### Dr. George Troubounis

Senior Technologist  
MERI Environmental Solutions  
GmbH, Germany  
Phone: Available upon request  
Email: [gt@meri.de](mailto:gt@meri.de)  
Relationship: Former supervisor and  
technical mentor (5 years  
collaboration)

### Dr. Tri Le

Wastewater Process Expert  
Jacobs Solutions, USA  
Phone: Available upon request  
Email: [tri.le1@jacobs.com](mailto:tri.le1@jacobs.com)  
Relationship: Current client and  
technical collaborator (3+ years)

### PhD. Hung Bui

Wastewater Process Specialist  
Lindström Group, Finland  
Phone: Available upon request  
Email:  
[hung.bui@lindstromgroup.com](mailto:hung.bui@lindstromgroup.com)  
Relationship: Professional colleague  
and technical collaborator (5+ years)

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**Date:** 22.05.2026



**Signature:** Anh Thang Nguyen