

SAY HELLO

Campus Ring 3
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LANGUAGES

English
Native / academic proficiency (passed with 70%)

German
A2.2 and climbing: B1 targeted for February 2027

THE TOOLBOX

Project & Cost Thinking
Is it worth doing, and what could go wrong?
Cash Flow Analysis, Capital Budgeting, Risk & Opportunity Management, Cost Optimization, Business Cases

Data & Excel
What is this data really saying?
Applied Statistics, Variance Analysis, Solver, What-If Analysis, PivotTables, PowerPivot, INDEX/MATCH & XLOOKUP, Dashboards, VBA Macros, Data Cleaning

Supply Chain & Operations
Where does the flow get stuck?
ABC/XYZ Classification, Logistics Network Planning, Material Flow Optimization, Linear Programming & Duality, Facility Layout Planning

Simulation
What happens if…?
AnyLogic (Discrete-Event & Agent-Based, Resource Pools, Queue Analysis, State charts, Parameter Variation), Process Flow Charting

Engineering & Production
Can someone actually build this?
CAD, BOM, OPC, P&ID, CAPP/CAM & CNC Machining, 3D Scanning & Printing (STL), PLC Ladder Diagrams

Python
Can I automate it?
Functions, Strings, Lists, Tuples, Dictionaries, Stacks & Queues, File I/O, Modules, HTML Output

Amogelang Kagisho Lecwidi

Industrial Engineering & Management Student · *Fixer of queues, schedules and bottlenecks*

THE SHORT VERSION

I'm drawn to systems that almost work: the queue that never quite clears, the schedule that collides with itself, the supply chain with one stubborn bottleneck. I study Industrial Engineering and Management at Constructor University, and lately I've been turning those headaches into models I can test: bank queues and factory repair crews in AnyLogic, transport costs in Excel Solver, and small Python programs for everything in between. Mentoring international students and running logistics for campus events taught me the other half of the job: a good plan still has to survive real people and real deadlines. I'm looking for internship and work student roles where I can keep doing exactly that.

EXPERIENCE: WHERE PLANS MET REALITY

Summer Camp Mentor | Constructor University, Bremen | Jul 2026 – Aug 2026

- **The situation:** a camp full of international participants, each arriving with different questions and expectations.
- **What I did:** I was the first person they talked to. I onboarded students, settled conflicts before they grew, and collected daily feedback so the schedule could be adjusted while camp was still running.

Logistics Planning | Math Society, Constructor University

- **The situation:** events go wrong in small ways: equipment in the wrong place, two activities booked into the same slot.
- **What I did:** I planned layouts and equipment setups, and built Excel schedules and tracking sheets that forecast what we needed and showed overlaps before they happened.

Mathematics & Physics Tutor | Private / Independent | Jan 2019 – Sep 2025

- **Nearly seven years** of tutoring Grade 9–12 students in maths and physics. I wrote custom problem sets and tracked each student's performance in Excel, so we could see what was working instead of guessing.

THE CLASSROOM SIDE

BSc Industrial Engineering and Management

Constructor University, Bremen, Germany

Key modules: Intro to Supply Chain & Logistics (ABC/XYZ Analysis), Operations Research, Process Modelling & Simulation, Product & Production System Design (Fundamentals of Engineering Design; Advanced Production System Design), Programming in Python, International Business, Microeconomics, Macroeconomics, Introduction to Accounting & Finance, Calculus, General Industrial Engineering.

SELF-TAUGHT, ON PURPOSE

Microsoft Excel 2013: From Beginner to Advanced and Beyond | Udemy | Kyle Pew

Most real-world data ends up in a spreadsheet, so I learned to handle it properly: lookup and logic functions (VLOOKUP, INDEX/MATCH, IF), formula auditing and data cleaning, PivotTable reports for large data sets, PowerPivot models and dashboards, and VBA macros to automate the repetitive parts of planning and tracking sheets.

PROBLEMS I'VE WORKED ON

Making Things Break on Purpose (in Simulation) | AnyLogic, Constructor University

- **The bank that kept people waiting:** I built a discrete-event model of a bank with an ATM, tellers and business tellers, then added statistics and charts to see where customers actually queued, and wrote up what the numbers showed.
- **Getting a product to catch on:** in an agent-based diffusion model I changed the parameters across at least three scenarios to see what moves market share, and explained the differences in a report.
- **Keeping factories running:** I modelled a network of factories, trucks, helicopters and a maintenance centre: factories fail or need service, requests pile up in a backlog, and transport has to be sent. Then I added a storm that shuts everything down and colour-coded each factory (green, yellow, red, blue) so the state of the network is visible at a glance.
- **Bottlenecks and busy resources:** built production and service models with resource pools, delays and conditional routing to find which resource was overloaded and where work piled up.

Numbers That Move Things | Supply Chain Analytics & Operations Research

- **Not every item deserves the same attention:** I sorted inventory by value (ABC) and demand volatility (XYZ) to decide where safety stock and warehouse space should go.
- **The cheapest way from A to B:** I set up linear programming and network flow models in Excel Solver to minimise transportation cost within capacity limits.
- **The other side of the problem:** I solved LPs with the simplex method, formulated the dual, and used complementary slackness to work through optimality.
- **Trade-offs:** weighed costs against benefits, and supply against demand, in economic analyses of international markets.

From Drawing to Production Line | Engineering Design | Fall 2026

- **So someone else can build it:** isometric and multiview drawings with dimensions and sections (CAD).
- **From a scan to a printed part:** point cloud, 3D model, STL file, then choosing the right printing technology.
- **How a part actually gets made:** BOMs and assembly plans, tool selection, machining parameters and CNC machining (CAPP/CAM), plus multi-level BOMs and Operations Process Charts.
- **Logic before machines:** control logic written as PLC ladder diagrams and tested in simulation.
- **Where things go:** facility layout, location and allocation, material handling, job-shop scheduling and group technology.

Small Programs, Good Habits | Python, Constructor University (CTMS-14)

- **Everyday tools:** unit converters, a vowel counter, string slicing and replacement, a number-guessing game, plus earlier programs for input validation, numerical calculations and custom grid rendering.
- **Working with files and lists:** programs that read and write text files, count words per line, sum numbers from a file and copy files; list functions, a text histogram and min/max.
- **Tuples, dictionaries and stacks:** a mini English–Swedish translator, scalar products with min/max positions, and a stack that handles underflow properly.
- **Structure and output:** conversion tables to screen, text file and HTML; a list-based queue; code split into reusable modules.

Bremen, October 29, 2026 Amogelang Kagisho Lecwidi