System Developer

I enjoy building systems that work efficiently and scale well. I especially love tackling backend challenges, whether it’s optimizing performance, designing databases, or making APIs more seamless. Always learning, always improving.

Intro | Technical Skills | Education

Projects | About me | Contact

	Languages	Frameworks	Databases	Collaboration & Design
Proficient in		 		 
Experienced with	 	 		 
Less Experienced with	   			

My primary focus is Java, as it was the language I first learned and the foundation of most of my projects. I believe in mastering one language deeply while staying adaptable to others. While Java is my strongest skill, I am also familiar with technologies like JavaScript, Swift, and Python, and I'm always open to learning new languages.

MALMÖ UNIVERSITY

Bachelor of Science in Computer Science

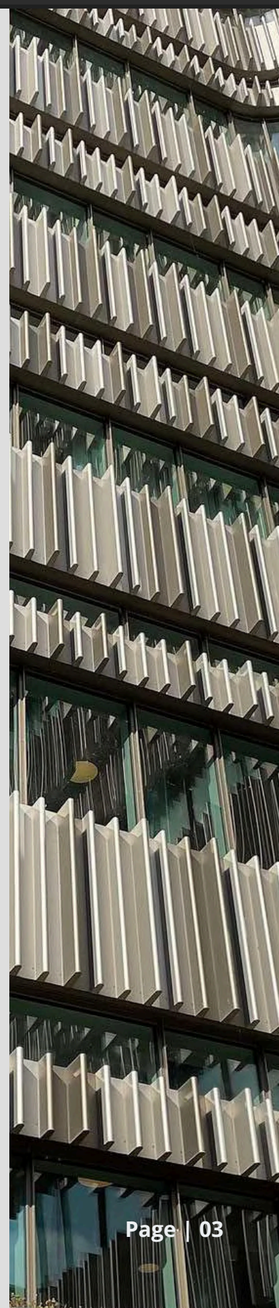
Specialization: Computer Systems Development

Malmö University, 2022 - 2025

Studied the development of large-scale computer systems, focusing on software architecture, backend development, and system optimization.

Key Topics & Skills:

Algorithms & Data Structures	Greedy algorithms, graph algorithms, search & sorting, binary search trees, hash tables.
System Software	Operating systems, compilers, memory management, process scheduling, concurrency.
Cybersecurity	Threat models, authentication, malware protection, security policies.
Discrete Mathematics	Set theory, combinatorics, graph theory, proof techniques.
Software Engineering Principles	Object-oriented programming, multithreaded programming, web services.



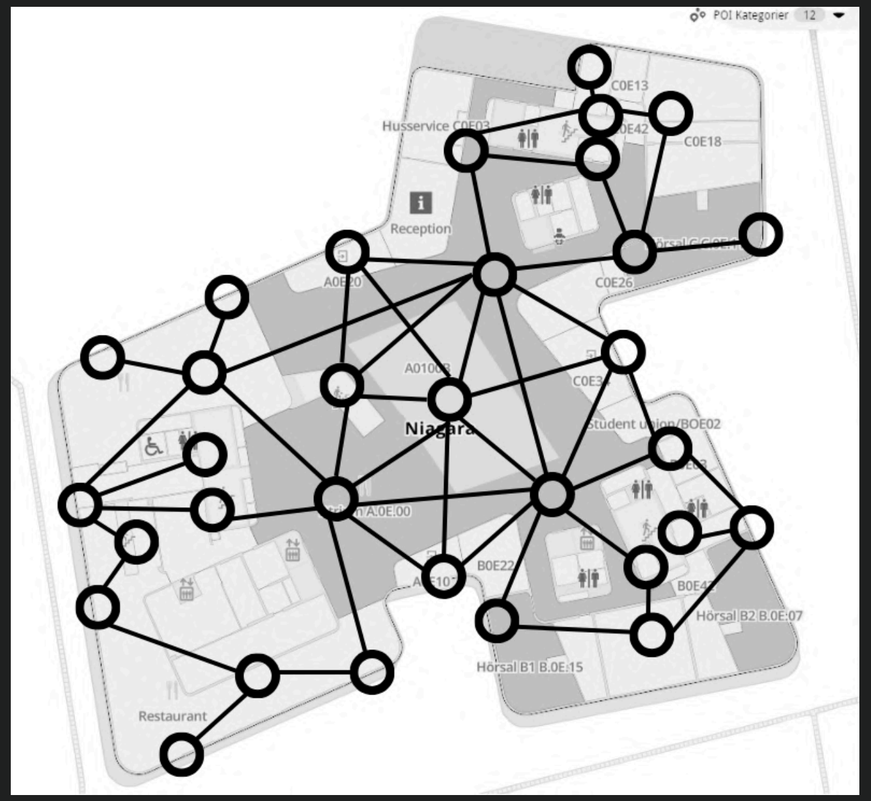
EvacAware: Real-Time Intelligence for Coordinated Evacuations

EvacAware is an evacuation assistance system designed to enhance situational awareness and streamline emergency response efforts. Developed in collaboration with **ASAxLab**, our team tackled the critical issue of **information overload** in **hazard notifications** by applying **graph theory** and **algorithmic optimization** for safer, more efficient evacuations.

Key Features:

- **Reduced Information Overload**: Optimizes notifications based on location and severity.
- **Graph-Based Routing**: Utilizes a directed graph with bidirectional edges to categorize hazard points, exits, and decision nodes.
- **Real-Time Hazard Updates**: Filters out hazardous routes and updates evacuation paths using Dijkstra's algorithm.
- **Graph Theory & Dijkstra's Algorithm**: Calculates the safest and shortest evacuation routes.
- **Lightweight Database**: Ensures real-time data synchronization for accuracy and speed.

This project showcases expertise in **algorithm design**, **system architecture**, and **real-time data processing** for smarter, safer evacuations.



ASAxLab

https://asaxlab.github.io/

https://www.iva.se/det-iva-gor/utmarkelser/ivas-100-lista/evacaware-real-time-intelligence-for-coordinated-evacuations/

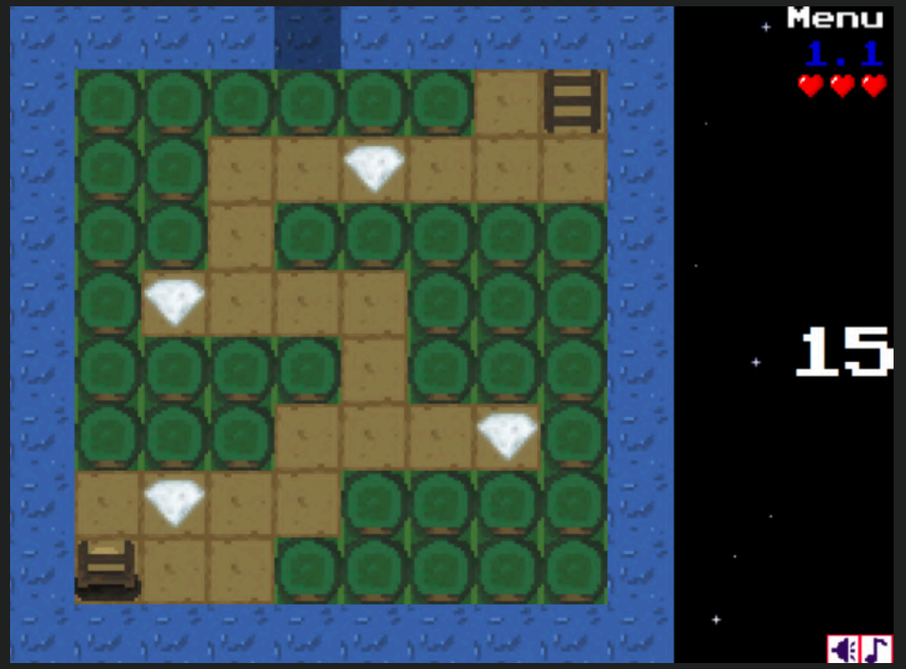
MazeGen

For this project, we were given an existing **JavaFX-based maze game** with poor code quality, numerous errors, and structural issues. Our main challenge was **prioritizing what to fix** while keeping the project functional.

We followed **Test-Driven Development (TDD)** principles to ensure quality improvements without introducing new bugs. The process involved **unit testing**, **code analysis**, **and systematic refactoring**. We also took on **rotating roles** as **developers**, **testers**, and **project managers**, which helped us gain a well-rounded software development experience.
Key improvements included:

- **Refactoring complex logic for better maintainability**.
- **Writing and running unit tests** to ensure reliability.
- **Fixing major bugs while preserving core functionality.**
- **Enhancing project structure for long-term scalability.**

This experience strengthened my **problem-solving, collaboration, and agile development skills**.



BusCatcher

BusCatcher is a web application that helps users plan their trips efficiently by integrating real-time public transport data with **Google Calendar**. The app not only provides location-based recommendations but also automatically calculates the best time to leave to catch a bus for scheduled events and return trips.

Tech Stack & Features

- Frontend: Developed with **HTML**, **CSS**, and **JavaScript**, featuring an intuitive UI for managing calendars, travel plans, and settings.
- Backend: Built with **Spring Boot** (Java), exposing **RESTful APIs** for real-time trip planning and calendar synchronization.
- APIs & Functionalities:
  - **Google Places API** for location search & suggestions.
  - **Google Calendar API** to fetch user events and automate trip scheduling.
  - **Skånetrafiken API** for real-time public transport data.
  - Secure API key handling and OAuth authentication.
  - The app calculates when users should leave to catch their bus on time.

This project showcases expertise in **full-stack development**, **API integration**, and **automation**.

LMB: Automotive Management System

A friend's uncle owned a small automotive workshop and needed a better system to handle invoices, customer data, and service tracking. But instead of just patching small issues, we decided to upgrade the entire system and build something that actually made a difference.

We developed a **custom software solution** using **C# Windows Forms** for the interface and **Java** for the server and PDF generation, with **MySQL** handling the database. The system automated much of the manual work—**generating** and **auto-filling invoices**, fetching vehicle data, **calculating prices and taxes**, and **sending emails** directly from the system. A **database** was set up for **tire storage** and **customer records**, making it easy to track **repairs** and **service history**. As per the client's request, we also implemented **role-based access**, giving admins full control while allowing sellers and repairmen to access only the features relevant to their tasks.

This experience gave me valuable insights into **real-world software development** and **designing efficient workflows** that adapt to a business's needs.

Marketplace X

Marketplace X was a school project where we developed a simple e-commerce platform. The project involved building user authentication, product management, and order processing. Our team focused on creating an efficient and functional system for product listings, user interactions, and messaging.

Mini Chat Application

A real-time chat application built with Java using client-server architecture. The project includes login authentication, message broadcasting, and an interactive user interface.

CashTime

CashTime is a simple mobile application for hourly workers to track their work hours and earnings. Built with Java and Swift, it allows users to log hours, calculate wages, and view basic statistics.

Word-Chain

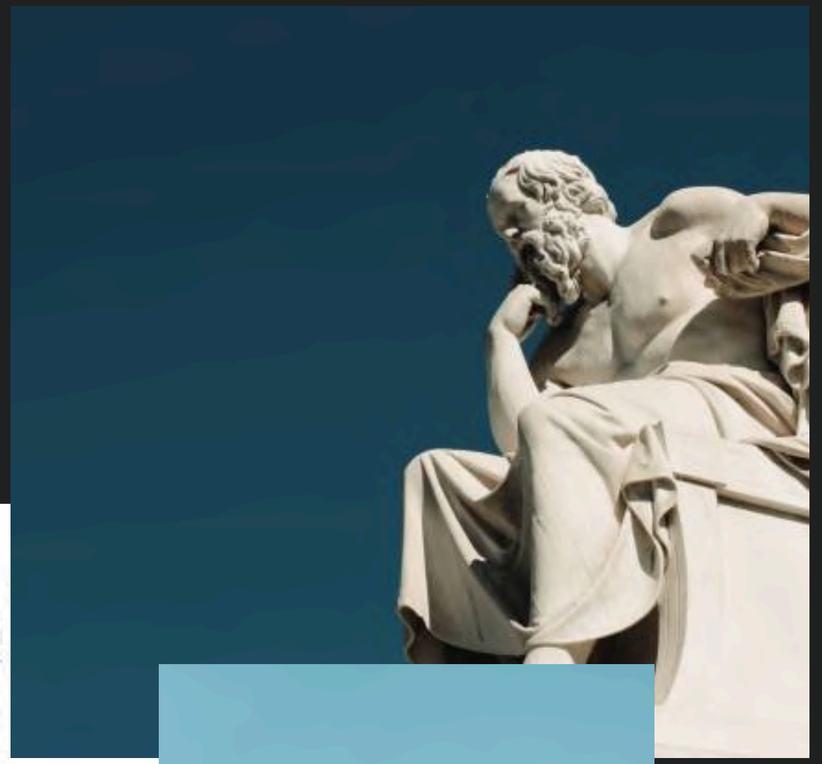
A graph-based word transformation problem where words are connected based on shared letters. Implemented using Breadth-First Search (BFS) for unweighted connections and Dijkstra's algorithm for weighted connections.

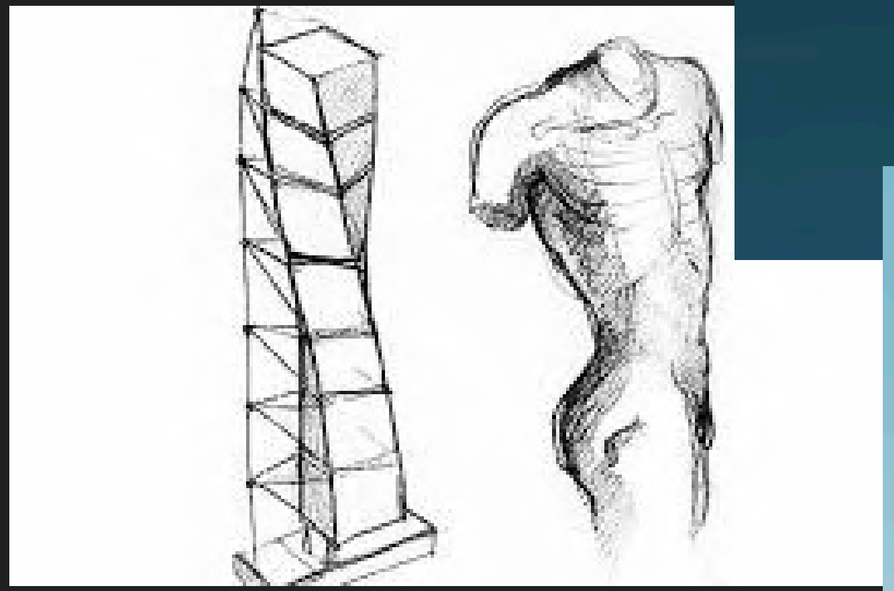
About me

Beside logic and software engineering, I have a wide range of interests, which I believe helps me think creatively and approach problems from different perspectives. I'm passionate about philosophy and self-reflection, as they push me to question assumptions, think critically and dive deeper into complex ideas---allowing me to solve problems in innovative ways and tackle challenges with a well-rounded, thoughtful approach.

I also have an admiration for nature and architecture. I find inspiration in the simplicity and complexity of the natural world, and the designs that shape our spaces.

I've studied architecture for a while and from there I gained a strong understanding of structure and design, which I now apply to my work in software development, where clean, functional code is as important as a well-crafted building.





Thank You

I’d be happy to chat over the phone if you have any questions, or even just for a casual conversation! If email is more convenient, feel free to reach out, and I’ll get back to you as soon as possible. I check my inbox every day or two, so I’ll be sure to respond promptly!

Looking forward to connecting with you!

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