MAXIMILIAN HOPFER

Pittsburgh, PA

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Visit my Website Portfolio

Available for full-time position with immediate start date

EDUCATION

Master of Science in Computer Science, Duquesne University, Pittsburgh, PA — May 2025
Bachelor of Science in Computer Science, Duquesne University, Pittsburgh, PA — graduated MAGNA CUM LAUDE
College of Applied Technology, Austria, Weiz | Certificate of the Higher Technical College of Mechanical Engineering

WORK EXPERIENCE

AWS Infrastructure Engineering Intern - Qintel — May 2024 – August 2024

- Automated cloud infrastructure setup for new accounts using CloudFormation stacks (YAML), reducing setup time by 40% and diminishing human errors, leading to more efficient deployments.
- Developed Lambda functions using Python (boto3) and SNS to automate cross-account CI/CD infrastructure setup, enabling developers to self-manage infrastructure and freeing up the infrastructure team for higher-priority tasks, leading to a 30% reduction in manual workload.
- Created CloudFormation stacks to configure and deploy Virtual Private Clouds (VPCs), subnets, Internet Gateways (IGWs), and NAT Gateways, and Transit Gateways, optimizing network architecture for scalability and security, and cost savings by aligning with AWS best practices.

Software Engineering Intern - BeyondNow — June 2023 – July 2023

- Fixed defects in Java and JavaScript AWS lambda functions and addressed UI-customization issues by correcting scope transition definitions. Improved performance and stability of UI-customization platform.
- Collaborated with product teams to verify and research Infonova functionality, assisting in drafting customer offers, improving accuracy and clarity, resulting in a 10% reduction in offer preparation time.
- Utilized Git for version control, efficiently committing code and managing branches directly from terminal

Automation Systems Developer – Vibratory Bowl Feeders at SoloPart GmbH — March 2020 – July 2020

- Developed and manufactured automation machines used for part separation and counting.

AVL-List GmbH: DDF-Port Design & Flow Development — July 2018 – August 2018

- Developed a Layout for a length-adjustable conrod for a combustion engine.

ACCOMPLISHMENTS

Award of Excellency, Duquesne University - Department of Computer Science and Mathematics — May 2024
Tutor, Duquesne University - Department of Computer Science and Mathematics — 2021 – 2024
Duquesne University Men's Soccer-Team: — 2020 – Present

- Team Captain, awarded "The Duke Award" for demonstrating leadership, communication skills, teamwork, adaptability and work ethic consistently as voted by fellow student-athletes and coaches.
- Recognized by the A-10 conference for the team's success as all region team, receiving recognition as a top 5% performer in the A-10 conference.

PROJECTS

Fully Dockerized 3-Tier application for automated delivery of Motivational Quotes per Email:

- Integrated ChatGPT API for dynamic custom quotes generation, enhancing user engagement.
- Utilized MongoDB database for user data storage, including preferences and scheduling information.
- Designed an intuitive GUI using Tkinter frontend, enabling users to easily configure their quote preferences and scheduling.

LSB Steganography:

- Python-based application for hiding messages within images using Least Significant Bit steganography.
- Leveraged image processing techniques including PIL library ensuring high efficiency.

Robotics:

- Advance Drone simulation of Crazyflie2, with ROS and Gazebo.
- Re-structure PID controller implement custom frequencies in C++.
- Work in Linux environments, including setting up and managing WSL, Ubuntu and other operating systems.
- Designed and executed data analysis processes, including writing Python scripts for analyzing and graphically visualizing ROSbag results to address and resolve timing and performance issues.

SKILLS

Bilingual (native German speaker, fluent in English) Back-end, C++; Java; JavaScript; Git, Html, Python, VS Code; MongodB, SQL, Databases, AWS, Amazon Cloud Service, CloudFormation, Infrastructure as code, Linux, ROS, yaml, cloud-computing