Carston Hernke

hernk009@umn.edu | carston.org | Authorized to work in USA + EU
+1 (612) 229-3289 | +49 151 72192842

PROFESSIONAL EXPERIENCE

TIER Mobility   **Berlin, Germany**
Senior Analytics Engineer, Geospatial   *Sep 2021 - May 2023*

- Built geospatial data pipelines, models, dashboards, and ad-hoc analyses to inform 400+ local market teams on the real-time and historical status of a fleet of thousands of connected e-bikes, scooters, and mopeds (Snowflake, dbt, Looker)
- Led the rollout of the CARTO geospatial analytics platform to 120 internal users, including leading training on geospatial analysis for 20 data team members
- Deployed the open-source Valhalla routing engine internally on Kubernetes to securely match raw route traces from 100M+ trips to the OpenStreetMap road network (Kubernetes, Airflow, AWS)

Slalom Consulting   **Minneapolis, USA**
Consultant, Data & Analytics   *Jul 2019 - Sep 2021*

- Developed core data engineering components of an internal ML Feature Store for a multinational automaker, reducing the amount of time client data scientists spend on feature engineering by 90% (Java/Spring Boot, Hadoop ecosystem)
- Led the successful production deployment of a reporting data pipeline for an financial services client, providing real-time insights for executive leadership to evaluate the efficiency of contact centers (AWS, Terraform)
- Assisted with business development, including building a geospatial offering strategy, designing pixel-perfect presentations for pitches, and scoping technical project timelines

SOFTWARE DEVELOPED

Honeycomb   **honeycomb.carston.org**
Browser-Based Geospatial Analysis Tool   *Jan 2023 - present*

- Honeycomb enables intuitive and approachable spatial analysis on H3 data by running directly in the browser, leveraging DuckDB, deck.gl and WebAssembly technologies
- Project involved learning frontend web development (Javascript, React) and user experience design (Figma) in a self-directed manner

EDUCATION

University of Minnesota   **Minneapolis, USA**
Carlson School of Management   *Sep 2015 – May 2019*

Bachelor of Science in Business, *magna cum laude*
Major: Management Information Systems; Minor: Computer Science
GPA: 3.7 / 4.0

Honors Thesis: "Usage, equity, and safety of shared electric scooters: a geospatial analysis of trips taken in Minneapolis, Minnesota"

SKILLS

- Programming Languages: Python, JavaScript, SQL, R, Go
- Technologies: AWS, Snowflake, Kubernetes, dbt, Airflow, Terraform, Looker, DuckDB, deck.gl
- Languages: English (Native), Norwegian (CEFR B1), German (CEFR A2)