Dennies Bor

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Scholar: Google Scholar

PROFESSIONAL SUMMARY

Software engineer with a scientific-computing background, building and deploying full-stack applications, dashboards, and reproducible research tooling. Experienced with cloud deployment, CI/CD automation, containerization, and Linux-based operations for reliable delivery of data products.

SKILLS SUMMARY

- **Frontend:** React, modern SPA workflows, dashboard UI/UX, visualization-driven interfaces.
- **Backend & APIs:** REST patterns, data-serving endpoints, automation scripts and pipeline tooling.
- **Cloud & DevOps:** AWS, Docker, Nginx, systemd, GitHub Actions (CI/CD), Linux administration.
- **Data Products:** Reproducible data pipelines, batch processing, packaging research artifacts for delivery.
- **Engineering Practices:** Git workflows, structured repos, documentation-first shipping, release automation.

EDUCATION

- **George Mason University**   Fairfax, VA, USA
  PhD in Earth Systems and Geoinformation Sciences (Advisor: Dr. Edward Oughton)   *Sep 2023 – Present*

  Selected Coursework: Web-based GIS; GIS Algorithms/Programming; Spatial Computing; Earth Sci Data / Advanced Data Analysis; Quantitative Methods.
  GPA: 3.85

- **Technical University of Kenya**   Nairobi, Kenya
  BEng in Aeronautical Engineering (First Class Honors)   *Sep 2013 – May 2019*

EXPERIENCE

- **Graduate Research Assistant**   George Mason University, VA, USA
  Research Software, Dashboards, Deployment Automation   *May 2022 – Present*
  - Developed interactive web-based GIS and research dashboards for infrastructure resilience and risk analysis.
  - Built deployment-ready research artifacts (data pipelines + UI) and maintained reproducible workflows for sharing results.
  - Automated build/release pipelines using GitHub Actions; containerized components where appropriate.

- **Engineering Intern**   Broglio Space Center, Malindi, Kenya
  Satellite Operations, Remote Sensing   *Aug 2018 – Nov 2018*
  - Supported satellite tracking and telemetry for geospatial applications.
  - Assisted in the maintenance and operation of RF communication systems.

PROJECTS & PROPOSALS

- **Portfolio Platform and Research Dashboards (denniesbor.github.io):** GitHub — Live
- **Reproducible Grid Mapping Dashboard (spw-geophy-io):** Preprint — GitHub — Dashboard
- **Coupled Space Weather Impact Model (C-SWIM):** Preprint — GitHub — Dashboard
- **Ops Automation Utilities (linux_sys_admin_scripts):** GitHub
- **Computer Vision for Power Substation Asset Detection (substation-assets-identification):** GitHub

PROFESSIONAL AFFILIATIONS

- **National Center for Atmospheric Research**   USA
  Early Career Faculty Innovators Program   *2023 – 2025*
- **African Institute of Mathematical Sciences**   South Africa
  Africa Data Science Intensive Program   *2022*

REFERENCES

Available upon request.