

## WORK EXPERIENCE

### Geospatial Infrastructure Specialist

#### KS Umweltgutachten

📅 04/2024 - Present 📍 Berlin, Germany

- Lead the development and management of geodata across 6 departments and over 50 staff, improving compliance with ecological assessment regulations and streamlining field operations in Germany and France.
- Analyze and standardize geodata workflows for over 100 planned renewable energy sites, integrating ecological data into regulatory reports.
- Design and implement automated data pipelines using the qGIS Python Console and SQL, cutting processing time by approximately 70% - from raw field data to publication-ready visualizations – while integrating emerging environmental monitoring technologies.

### Earth Observation Intern

#### GAF AG

📅 03/2023 - 04/2023 📍 Munich, Germany

- Contributed to early development of the [EvoLand project](#) (Copernicus Land Monitoring evolution), supporting integration of SAR, hyperspectral, and LiDAR satellite data by preparing documentation, researching datasets, identifying European test sites across 10 bioregions, and presenting findings.
- Shadowed departments using EO data for emergency response, urban planning, rural development, and land change monitoring.

### Soil Health and GIS Working Student

#### Bayerische Landesanstalt für Wald und Forstwirtschaft

📅 03/2022 - 03/2023 📍 Freising, Bayern, Germany

- Maintained, organized, and updated the geodatabase for the Bavarian section of the European wide survey on forest soil ([Bodenzustandserhebung im Wald](#))
- Collected and analyzed samples in the field, learning new research methods within geochemical ecology, soil ecology, silviculture, and nutrient cycles as well as the administrative, political, and cultural challenges of international monitoring of natural resources

### Ecological Horticulture and GIS Intern

#### Rose Kennedy Greenway Conservancy

📅 04/2021 - 08/2021 📍 Boston MA, USA

🔗 <https://storymaps.arcgis.com/stories/48f9abea94234d2cb2993708e847c47a>

- Sustained daily operations for this organically maintained, 17-acre park in the heart of Boston, with focus on learning ecological practices for plant care, pollinator support, and soil management in the urban setting
- Established GIS database for ecological monitoring of soil health, tree growth, fungal support, water resource management and communicate the park ecology to stakeholders

### Farmhand

#### Historic Wright-Locke Farms

📅 09/2020 - 12/2020 📍 Winchester, MA, USA

- Carried out harvest for this organic, community-supported farm and education center near Boston, MA learning agroforestry, regenerative soil management, indigenous land practices and the economics of farming

### Associate Researcher

#### Yale University School of Medicine, Psychiatry, Picciotto lab

📅 5-8/2016, 5-8/2018 📍 New Haven, CT, USA

- Contributed to the experimental design, data collection, and analysis of two landmark publications in world leading neuroscience lab studying the molecular basis of aggression and social interactions under Dr. Alan Lewis
- Fostered deep and formative understanding of the scientific method to develop comprehensive, self-aware, and compelling scientific arguments through close collaboration with my principle investigator

[Neuropsychopharmacology](#): Bidirectional regulation of aggression in mice by hippocampal  $\alpha$ -7 in nAChR,

[Social Neuroscience](#): Induction of reversible bidirectional social approach bias by olfactory conditioning in male mice

### Ecological Landscaper

#### Holmes Fine Gardens

📅 07/2017 – 2020 (seasonal) 📍 Newtown, CT, USA

- Designed and implemented sustainable landscaping projects using native species to enhance biodiversity, restore habitats, and manage wetlands and forests

## SUMMARY

I specialize in applying geospatial technology to develop governance-based solutions for urgent ecological challenges. With an interdisciplinary background, I focus on fostering environmental awareness through the collection, analysis, visualization, and communication of geodata.

## EDUCATION

#### Newtown High School

📅 09/2013 - 06/2017 📍 Newtown, Connecticut, USA

#### B.Sc. Biology

#### B.Sc International Relations

#### Tufts University

📅 09/2017 - 05/2021 📍 Boston, Massachusetts, USA

- *Summa Cum Laude*

#### M.Sc Land Management and Geospatial Science

#### Technische Universität München

📅 10/2021 - 12/2023 📍 Munich, Germany

- **Concentration:** Geospatial Engineering for Land, Water, & Forestry
- **Thesis:** Harnessing Geosensor Networks for Environmental Decision-Making: Water Management and Renaturation at the Kalterbach, Germany (*passed with high distinction*)

## SELECTED COURSE WORK

#### Advanced Geospatial Modeling

Collaborated with Munich to enhance their IoT Smart City program applied to smart building management. (Grafana)

#### Landscape Management – Application Study

Synthesized landscape ecology, GIS and environmental planning influence regional development in Ethiopia

#### Urban Ecology

Urban neighborhood remodel using microclimate modeling and stakeholder participatory action

## INTERNATIONAL EXPERIENCE

#### The Japan Society Junior Fellows Program

New York, NY; Tokyo, Japan

#### Tufts with Rwanda Fellowship on Genocide and Reconciliation

Kigali, Rwanda; Boston, MA

#### Refugee Support Fellow, Samos Volunteers

Samos, Greece

#### Agroecology Volunteer – WWOOF Peru

Manu, Peruvian Amazon

## LANGUAGES

English (Native) German (C1, Telc Certificate) Spanish (B2)

## VISUAL ARTS

🔗 <https://www.dawsonstout.com/>

Gallery artist specializing in oil, gouache and ceramics; selling original works and commissions.

Instagram: dawsons.art