Michael Dunst

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WORK EXPERIENCE (selected)

Strategic Planning and Analysis Intern, SEPTA, 09/2023 - present

- Supporting the multimodal agency's large-scale reimaginings of regional rail, trolleys, and buses by creating graphics for internal and external presentations in the Adobe Suite and GIS packages
- Used ArcGIS to create a model of multiple sections of the regional rail network's infrastructure

Operations Research Intern, Volpe National Transportation Systems Center, Summer 2023

- Combined a systems dynamics philosophy with past industry experience to analyze the trade offs necessary when planning multimodal streets projects and identify gaps in data collection
- Crafted a small study area using Python, ArcGIS Pro, and R to study how users can apply the General Modeling Network Specification to travel demand/accessibility modeling

Research Assistant, University of Pennsylvania, 11/2022-05/2023

- Worked under Dr. Erick Guerra to analyze how land is used in every American metro area
- Created a geospatial data analysis process in ArcGIS as a proof of concept; transitioned the data flow into R to improve the speed, efficiency, and accuracy of processing the entire country
- Worked with three other research assistants to coordinate project management

Land Planner, Continental Properties, 05/2021-09/2022

- Managed diverse input from stakeholders to balance the constraints of zoning, resident experience, stormwater management, construction management, and more
- Self-managed competing deadlines with internal and external pressures
- Coordinated the development process by using AutoCAD to create conceptual site plans, researching entitlements processes, and communicating with engineering consultants and planners/officials

Transportation Planning Intern, UMN Parking and Transportation Services, 09/2019-05/2021

- Conducted transportation research including proposing data collection and analysis methods and recommending solutions to multimodal transportation issues on campus
- Cataloged all impervious surface on campus and created solutions in GIS software to increase data collection efficiency and accuracy

Urban and Regional Planning Intern, Wisconsin Department of Transportation, 05/2019-08/2019

- Prepared project scope recommendations for upcoming projects by selecting bike and pedestrian facilities based on relevant planning documents and best practices
- Checked engineering plans and construction sites for compliance with department standards, ADA/PROWAG regulations, and recommendations given at previous stages

EDUCATION

University of Pennsylvania

- Master's of City Planning, Sustainable Transportation Infrastructure Planning
- Expected graduation May 2024, GPA: 3.80

University of Minnesota

- Bachelor of Science, Urban Studies
- Bachelor of Environmental Design, Landscape Design and Planning

SKILLS

- Map making and geospatial analysis in R, ArcGIS Pro, and Python
- Proficiency in AutoCAD with skills particularly in site planning
- Advanced understanding of the current state of transportation planning
- Basic understanding of traffic engineering concepts and VISSIM/VISUM
- Presentation and graphic design in Adobe Creative Suite (Illustrator, InDesign, etc.)
- Quick to learn complex situations and reconcile different viewpoints