Grant J. Goedjen

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Education

Doctor of Philosophy, Civil & Environmental Engineering ***Ongoing***
University of Minnesota, Minneapolis, Minnesota

Master of Environmental Engineering ***May 2020***
Texas Tech University, Lubbock, Texas

Bachelor of Science, Environmental Engineering ***May 2020***
Texas Tech University, Lubbock, Texas

Minors: Bioengineering, Civil Engineering, Biology, & Mathematics.

Achievements: Presidents List (2017, 2019, 2020), Deans List (2015, 2017, 2019, 2020)

Certifications

Texas: Engineer in Training, **EIT No. 71799**
Minnesota: Engineer in Training, **EIT No. 160572**

Skills

- **Knowledge Base:** H&H Analyses & Design, Water Resources, Water & Wastewater Treatment, Biological System Design, Environmental System Assessment & Design, Remediation Design, Contaminant Fate & Transport, Environmental Toxicology.
- **Drafting:** MicroStation Suite, Openroads Suite, AutoCAD Suite, AutoCAD Civil 3D, Fusion 360, Microsoft Suite, LaTeX.
- **GIS:** ArcGIS Suite, QGIS.
- **Modeling Software:** ICPR, HY-8, HEC-HMS, HEC-RAS, EPA-NET, EPA SWMM, EQC, ACE, GW Vistas, MODFLOW, HydroCAD, InfraWorks, R.
- **Programming Languages**: R, MATLAB, Python, Microsoft Excel VBA.

Experience

Doctoral Researcher: University of Minnesota, Minneapolis Mn ***Sept 2020 - Current***
- Designed and conducted experimental methods for advanced detection of contaminants in surface and ground water systems.
- Coordinated sampling and QA/QC plans for intra-state sample collection with state, local, and university organizations.
- Coded statistical analysis and data visualization programs using R, Python, and Microsoft Excel.
- Managed project git repositories and oversaw data storage plans.
- Oversaw field investigations for surface and groundwater sampling.
- Developed analytical methods for the quantification of micropollutants for the St. Paul Ozonation Pilot Water Treatment Plant

Engineering Staff: **Harkins Engineering, Remote** **2020**
- Tele-design and collaboration in water resources and water / wastewater engineering.
- Drafting in MicroStation v8i and AutoCAD Civil 3d.
- Residential and commercial water resource design & development.
- GIS support and drafting using ArcGIS suite and QGIS.

Engineering Intern: **Texas Dept. of Transportation, District Design Office, Lubbock Tx** **Feb 2019 – Aug 2020**
- Drafting, analysis, and design in Bentley MicroStation, Openroads, SignCAD, ArcGIS suite, and Microsoft Excel.
- Hydraulic modeling and design in HEC-RAS, HY-8, HydroCAD, and HEC-HMS.
- Presentation of proposed design and materials in public town hall meetings.
- Environmental protection, EPIC, and SW3P design, implementation, oversight, and documentation.
- Training of engineering and design staff on operation of modeling software and ArcGIS.

Civil Engineering Student: **Parkhill, Smith, & Cooper, Lubbock Tx** **April 2018 – Feb 2019**
- Hydraulic systems design using ICPR, SWMM, HEC-HMS, HEC-RAS.
- 2D and 3D design, surface development, manipulation, and drafting in AutoCAD, AutoCAD Civil 3D.

University Housing: Texas Tech University, Lubbock Tx **Aug 2017 – May 2018**

Graduate Research Assistant: Texas Tech University, Lubbock, Tx **May 2016 – Jan 2020**
- Conducted independent research under Dr. Audra Morse (Wastewater treatment), Dr. Theodore Cleveland & Dr. William Asquith (Computational hydraulics & hydrology), and Dr. Siva Vanapalli (Toxicology and Biomicrofludics).
- Peer reviewed proposed research papers for Water Environmental Research academic journal.
- Collaboration with the City of Lubbock, County of Lubbock, Partnering Universities, TxDOT, and the USGS.

International Experience: Tokyo, Japan **Summer 2018**
- Presented academic research at the University of Japan & Tokyo Tech University.
- Attended a seminar on the practical applications of supercomputer modeling in civil engineering.
- Engaged in an industrial science conference at the University of Tokyo Institute of Industrial Science.

Community Involvement

Society of Environmental Professional, *President*
TTU NASA Rasc-Al team, *LaTeX Coder & Editor*
TTU WEAT Design Team, *Design Engineer*
Reeds Ranch & Rescue, *Animal Rehabilitation Specialist*
LYFE Mentoring Program, *Mentor*
American Society of Civil Engineers, *Member*
Texas Society of Professional Engineers, *Member*
Men of STEM Learning Community, *Advisor*