Andrew Kurzweil

MS Candidate seeking Data Engineer/Analyst role

Education

Villanova University, *Villanova, PA*

    MS Civil Engineering, GPA: 3.63   May 2021

    MS Applied Statistics, GPA: 3.21   May 2021

    BS Civil and Environmental Engineering with Computer Science minor, GPA: 3.51   May 2018

McQuaid Jesuit High School, *Rochester, NY*   June 2014

Experience

Villanova University, Center for Resilient Water Systems; *Graduate Researcher*   June 2018-Present

- Maintain and update sensor network for real-time monitoring of green stormwater infrastructure (GSI).
- Develop and assess statistical techniques for GSI performance evaluation using custom R ETL pipeline.
- Assist team with design and deployment of new cloud-based data management solution.
- Present progress and findings at monthly project meetings and at annual research sponsor meetings.

Villanova University, Department of Environmental Health and Safety; *Junior Software Engineer*   January 2019-May 2020

- Collaborated with stakeholders to determine chemical lifecycle tracking and reporting requirements.
- Developed LAMP web application using Laravel and Bootstrap to meet requirements.

Villanova University – *Senior Capstone Project: PennDOT I-95 Revive Project*   August 2017-May 2018

- Completed site suitability, categorical exclusion, and environmental impact analyses for structural, hydraulic and transportation aspects of interstate exit ramp redesign.
- Delivered cost analysis, preliminary construction schedule, and visual rendering of designs to client.

General Dynamics Electric Boat; *Internal Structures Intern*   June 2017-July 2017

- Applied Finite Element Analysis (FEA) techniques to onboard equipment foundation designs.
- Compiled database of components, enabling compatibility checks throughout build process.

CHA Consulting, Inc.; *Technical Intern, Aviation Services Group*   May 2016-August 2016

- Compiled detailed design requirements for airfield upgrades at client sites nationwide including taxiway relocations, maintenance apron improvements, and deicing fluid collection systems.

Technical Skills

- 7 years CAD experience: familiar with Autodesk 360, Bentley MicroStation, BIM
- 5 years full-stack development experience for web apps and REST APIs using php, python, SQL, Git/Version Control
- 5 years hydraulic and hydrologic modelling experience using EPA SWMM, HEC-HMS, HEC-RAS, python
- 3 years statistical analysis experience using R, python including visualization with ggplot, plotly
- 3 years experience administering environmental monitoring systems using Campbell Scientific and other equipment
- 1 year system administration experience: AWS/GCP Ubuntu systems running Apache, R Shiny server, MySQL, Jenkins

Leadership and Affiliations

Villanova University, Office for Residence Life; *Head Resident Assistant*   August 2016-Present

- Foster personal, academic, and social growth while building community among residents.
- Host weekly staff meetings to plan events, address resident concerns, and mentor fellow RAs.

Villanova University Tech Crew, *President, Audio and Lighting Technician, Website Team Lead*   September 2014-Present

- On-campus student-run business offering A/V services for small presentations to large-scale concerts.
- Responsible for training new personnel, attending weekly business meetings, fostering and improving client relationships, developing an organizational strategy, planning and running events.

American Society of Civil Engineers (ASCE), *Student Member*   August 2014-Present

IEEE, *Student Member*   February 2016-Present

Boy Scouts of America, *Eagle Scout*   March 2014

Contact

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