

Boyang Wang
98 Audubon Rd, Teaneck, NJ 07666

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Creighton Manning Engineering LLP
145 Main Street, 3rd Floor
Ossining, NY 10562

Dear Hiring Manager,

I would like to express my interest in Transportation Planner position at your firm. What excites me about geospatial data is its potential to provide new insights for decision-making and problem-solving in planning activities using GIS and data visualization technology. After reviewing the job requirements, I am confident that this position is a perfect match to my interest and background experience.

I have used Esri products extensively in my graduate study in GIS. ArcMap and ArcGIS Pro are my mostly used software for geospatial data creation, collection, processing and visualization. I conducted many analyses using census datasets and Tiger/LINE shapefiles from Census Bureau in various geographic units. For the data that contained meaningful but complex information, I used ArcGIS Online's app templates or JavaScript mapping APIs to create web maps with narratives, illustrations and interactive widgets to make them easy to navigate. I find these interactive web maps more effective than papers and slideshows in explaining the planning outcome to target audiences. My other programming experiences include using Python to automate workflows, using SQL in database management systems to manipulate large datasets, and using R to perform statistical analysis.

My interest in graphic design dates back earlier. When I was a graduate student in Carnegie Mellon University, I was in charge of designing weekly posters for School of Architecture using Illustrator. I believe that good graphic design and cartography should be combined to best convey the information derived from data analyses. You can find examples of my work and the web maps I created for different audiences in my portfolio: <https://personal.psu.edu/bqw5354/portfolio/>

I like to work with people, to learn from their knowledge and experience, and to use my skills to increase productivity in the workplace. In my previous job, I was in charge of reviewing project management software to find one that best suited to our business model. Then, I provided training to new hires on both how the software facilitated our workflow and how to work with the software itself. I also prepared many bids for hundred-thousand-dollar construction projects based on plans and specifications, so I fully understand the importance of meeting deadlines and expectations. I am very excited to use my knowledge in geospatial data analysis and visualization and graphic design to contribute to transportation, transit and traffic studies at your firm.

I would appreciate the opportunity to further discuss my qualifications. You may contact me at (412)999-2488 or bqw5354@psu.edu at any time. Thank you in advance for your time and consideration.

Sincerely,



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Address: 98 Audubon Rd, Teaneck, NJ 07666
Contact: (412)999-2488 / bqw5354@psu.edu

OBJECTIVE

- Seeking a full-time position to utilize my data analysis, GIS and graphic design skills in transportation planning.

EDUCATION

Master of Geographic Information Systems **May 2019 - May 2021 (Expected)**

- The Pennsylvania State University, State College, PA GPA: 4.00/4.00
- Also obtained Geospatial Programming and Web Map Development certificate

Master of Science in Architecture-Engineering-Construction Management **Aug 2012 - Dec 2013**

- Carnegie Mellon University, Pittsburgh, PA GPA: 3.92/4.00

Bachelor of Management in Construction Engineering and Project Management **Sep 2008 - Jun 2012**

- Tianjin University, Tianjin, China GPA: 3.50/4.00

CURRICULUM PROJECTS

- Conducted a residential real estate development location analysis in Los Angeles County, CA in PostgreSQL using PostGIS with census data from USCB and crime data from LAPD.
- Analyzed the clusters of high and low house values in Bergen County, NJ and the correlation between house value and various geographic and demographic variables using GeoDa and R Studio.
- Digitized a 1920 Sanborn map of part of Charlottesville, VA in a file geodatabase with geocoding enabled, topology validated, and edgematched with other digitized maps in a team of three using ArcMap.
- Developed a web mock-up using ArcGIS JavaScript API and Bootstrap to demonstrate the interface design and use case interaction of a new mobile parking application.
- Developed a web map to visualize the relationship between the number of shooting incidents, population density and median household income in NYC block groups using ArcGIS JavaScript API with data from Esri's REST feature service and NYPD's CSV table file.
- Conducted a housing location analysis for international students in CMU main campus using ArcMap.

WORK EXPERIENCE

Estimator in King Rose Construction, New York, NY **Feb 2014 - Oct 2018**

Project Coordinator (intern) in King Rose Construction, New York, NY **Jun 2013 - Aug 2013**

- Managed bidding activities, including identifying work scopes, reviewing specifications, determining work breakdown structures, pricing labor and materials, sourcing subcontractors and preparing bidding documents such as schedules and proposal forms.
- Set up Sage 100 Contractor templates and workflows for project management, including financial reporting, submittal approval process, change order management, procurement and subcontract drafting.
- In charge of training interns from various education background on project management essentials and project financial analysis, as well as training new project managers on software use.

KEY SKILLS

Programming

SQL (PostgreSQL, PostGIS), Python (ArcPy, PyQGIS, ArcGIS API for Python, Jupyter Notebook, pandas), web (HTML, CSS, JavaScript, ArcGIS JavaScript API, Leaflet API, jQuery, Bootstrap), R (RStudio), GDAL/OGR

Software

Esri series: (ArcMap, ArcGIS Pro, ArcGIS Enterprise, ArcGIS Online), QGIS, GeoServer, GeoDa, Autodesk series (AutoCAD, Revit), Microsoft series (Access, Excel, Project, Outlook, etc.), Adobe series (Photoshop, Illustrator, Audition, Premiere, After Effects), project management software (Procore, Sage, Corecon, FieldLens, Primavera)