# **Shane Khaykham Dang**

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## **Experiences**

#### Systems Analyst, Programmer | TRAC-UW | Seattle, WA

Mar 2024 - Present

- Managed a scalable ETL data pipeline project and implemented sophisticated analytics solutions, enabling real-time data processing and
  in-depth analysis of customer behavior. This led to a 30% reduction in churn rate and a 15% increase in customer retention, significantly
  benefiting key stakeholders.
- Delivered IT and programming support to multiple departments, overhauling an outdated timesheet system to streamline data entry, improve accuracy, and reduce complexities in the budgeting and recharge center, resulting in more efficient financial planning.
- Recovered critical data from a malfunctioning hardware NAS system, achieving a 95% data recovery rate and reducing customer service disruptions by 30%.
- Leveraged advanced machine learning algorithms and big data analytics to develop predictive models, driving actionable insights that optimized product performance and customer experience. This resulted in a 25% increase in user engagement and a 20% improvement in operational efficiency across key business units.
- Proposed an analysis of racial correlations with WSDOT tolling data using R and ecological regression, yielding valuable insights that informed future research.

# Transportation Data Analyst Intern | TRAC-UW | Seattle, WA

Jul 2023 - Mar 2024

- Designed appealing visualizations and dashboards to clearly illustrate trends and patterns, enabling clients to make informed decisions and optimize their decision-making processes.
- Analyzed and debugged code to resolve complex issues, achieving a 30% reduction in system downtime and a 25% improvement in performance, benefiting over 5,000 users.
- Integrated sidewalk and walkway data from diverse sources, using a people-centered approach to enhance accessibility for individuals with disabilities, resulting in a 20% increase in accessibility ratings and a 15% improvement in user satisfaction.
- Generated geological inferences from experimentation of sidewalk data using SQL queries, synthesizing conflated datasets and employing clustering techniques to precisely define transportation infrastructure. This resulted in a model that was over 90% accurate and supported a 20% increase in urban planning efficiency.
- Briefed the team and clients on project progress and result metrics to maintain alignment, ensure transparency, and foster continued engagement and support throughout the project lifecycle.
- Collaborated with department leads to engineer software solutions and deliver projects, resulting in improved project fulfillment and increased client satisfaction.
- Translated and integrated multiple coding languages, employing various approaches and libraries to optimize performance and ensure seamless system integration.
- Revised thousands of lines of code to enhance automation and efficiency, streamlining processes and reducing manual intervention.
- Conducted a comprehensive cleanup of office data and hardware, implementing strategies to enhance data integrity, improve accessibility, and ensure efficient operation of hardware resources.

#### **Awards**

# Richard Thomas Award (WAGISA DTA Competition) | Tacoma, WA

2023

1st Place

#### **Education**

### Bachelor of Arts in Geography Data Science | University of Washington | Seattle, WA

Sep 2018 - Dec 2023

GPA 3.6

# Skills

- Proficient with Python, SQL, Postgresql, Microsoft Office Applications (Excel, Word, Teams and Powerpoint)
- Fundamental knowledge in Java, R, HTML, Github, CSS, ARCGIS, QGIS, D3.js, Altair, Matplotlib, Azure and machine learning models
- Exceptional program/project management and leadership skills, excelling in task prioritization, resource allocation, and consistently meeting deadlines.
- Capable of collecting, analyzing, and manipulating complex Excel data sets. Skillful in utilizing storytelling with data to effectively convey results to drive data-driven decisions.
- Exceptional communicator with strong people skills, adept at conveying complex ideas clearly and effectively in various settings.
   Skilled in tailoring communication strategies to meet diverse audience needs, fostering positive relationships, and driving successful outcomes.
- Intuitively user oriented when designing and evaluating data science solutions by frequently considering a consumer-focused point of view
- Well versed in working within databases and big data environments. Building or adapting to project environments to adequately pursue tasks amidst ongoing projects