

# PRALAY BHATTACHARJEE

Denton, Texas | +1 (940) 977 - 9495 | pralaybhattacharjee19@gmail.com | <https://www.linkedin.com/in/pralaybhatt99/>

## SUMMARY

Analytical and execution-focused BCIS professional with a strong foundation in software fundamentals, data analytics, and business intelligence. Experienced in building dashboards, data pipelines, and decision-support tools using Python, SQL, Power BI, and Tableau, while supporting 200+ learners as an Instructional Assistant across Java and mainframe systems. Demonstrated leadership in driving cross-functional initiatives, organizing industry partnerships, and delivering measurable improvements, outcomes, and team performance through clear communication and rapid learning.

## EDUCATION

### University of North Texas

May 2026

*Bachelor of Science, Business Computer Information Systems (GPA: 3.87/4.0)*

- **Achievements:** President's List: Summer 2024, Fall 2024, Spring 2025, Dean's: Summer 2023, Fall 2025, *3<sup>rd</sup> Math Olympiad*
- **Coursework:** Data and Business Analysis, Data Structure and Algorithm, Java, COBOL, Mainframe, SQL, Tableau, Power BI

## WORK EXPERIENCE

### Teaching/Instructional Assistant - Data Visualization & Programming (Tableau, Power BI, Java and Mainframe) May 2025 - Present

Information Technology and Decision Sciences, University of North Texas

- BCIS 3610 - Data Visualization (August 2025 - Present): Achieved impactful data-driven learning outcomes for 100+ students, as measured by up to 33% improvement in course performance, by guiding the development of Tableau, Power BI, and Amazon QuickSight dashboards. Employed design thinking to clarify requirements and translate academic needs into technical solutions with a focus on KPI design and actionable insights.
- BCIS 3630 - OOP (May 2025 - Present): Enhanced student performance for 120+ learners, resulting in up to 11.5% boost in final grades through extra credit. Led academic support in Introduction to Java by aligning tutoring and grading with course objectives, facilitating hands-on learning in Java and IBM Mainframe tools (TN3270, ZXplore), and providing targeted feedback to address diverse learning challenges.

### UX (Web Content) Designer and Accessibility Project Analyst + Summer Intern

Jul 2024 - Aug 2025

University Brand Strategy and Communication, University of North Texas

- Accessibility Project Analyst Intern (Summer 2025): Delivered a 200% increase in user engagement and elevated QA and accessibility scores from 55% to over 90% by auditing and optimizing 2,600+ College of Education webpages using Siteimprove and CMS tools. Translated stakeholder requirements into actionable technical improvements while ensuring compliance with accessibility standards.
- Web Content Student Assistant (July 2024-August 2025): Achieved a 40% reduction in content errors and accelerated decision-making for site updates as measured by improved site quality and responsiveness. Maintained and enhanced 330+ UNT websites by resolving SEO and accessibility issues, managing stakeholder communications, and leveraging data-driven insights to improve usability for 50,000+ users.

## PROJECTS

### Workforce Intelligence Platform (Python, SQL, BI) – CGI AIS SCLC 2026

Dec 2025 - Present

- Designing and building a scalable workforce intelligence platform by integrating and analyzing large-scale U.S. government datasets from Data.gov; engineering Python-based data processing workflows and SQL pipelines to transform raw labor and economic data into structured, analytics-ready datasets and core KPIs.
- Developing and iterating interactive BI dashboards and predictive analytics features, including trend forecasting and scenario-based “what-if” analysis, to surface actionable insights and support strategic, non-technical decision-making as part of a national CGI analytics competition.

### ExtinguishAI: AI-Powered Drone Surveillance for Wildfire Prevention (Machine Learning, AI + IoT, Automation)

Apr 2025

- Developed a scalable, AI-driven drone surveillance system that autonomously detects and suppresses wildfires using machine learning, computer vision, LiDAR, thermal imaging, and Starlink-powered real-time data; reduced false alarms and response delays while covering 2.36M sq. mi. daily at a fraction of traditional costs.
- Engineered autonomous navigation, swarm coordination, & AI-based fire-retardant deployment; delivered an app for real-time alerts and control, projecting up to \$53.8B in annual damage prevention & earning finalist selection at the AIS SCLC national competition.

### Southern Company - UA Innovate 2025: Telecom Workforce Management Dashboard (Power BI, Excel, SQL)

Apr 2025

- Built a fully automated Power BI dashboard using Power Query and DAX to analyze 1,200+ rows of raw work management data, enabling leadership to assess productivity, & workforce distribution across 5+ departments; reduced manual reporting effort by ~80%.
- Designed 12+ interactive visuals (KPIs, heatmaps, time-series charts) with scalable architecture for real-time insights, helping identify workload imbalances, optimize staffing, and evaluate backfill needs in the Change Management division.

## TECHNICAL & SOFT SKILLS

- **Languages & Databases:** Python, Java, SQL, R Programming, CSS, HTML, IBM z/OS, REXX, TSO, COBOL, JCL, VSAM, ASP, C#
- **Tools & Technologies:** Tableau, Power BI Service, Amazon QuickSight (Q), AWS S3, AWS EC2, Redshift, SAP S/4HANA, Smartsheet, Modern Campus CMS, Drupal, API Integration (e.g., Google Analytics, Google Sheets), Google Cloud Platform (GCP), Microsoft Excel Specialist Certified
- **Expertise:** Data Analysis & Reporting, Business Metrics Development, Data Pipeline Design, Report Automation, Natural Language Querying (QuickSight Q), Dashboard Creation, Stakeholder Communication, SQL Querying & Data Extraction, Data-Driven Decision Making, Design Thinking

## CERTIFICATION

- IBM Z Xplore - Advanced Badge
- MS Excel Specialist
- Google Data Analytics Professional Certificate
- AWS Cloud Computing
- IBM Project Management
- AWS QuickSight for Business Analysts
- SAP S/4HANA
- Google Cloud Skills Boost

## EXTRACURRICULAR

### Association for Information Systems, University of North Texas | Executive Officer

Aug 2024 - Present

- Leading digital strategy and financial operations as Treasurer and Executive Officer, enhancing technical initiatives and driving engagement for a 150+ member AIS chapter through professional development and corporate partnerships.

### Wakeboarding Team, University of North Texas | Member

Aug 2021 - Aug 2023

- Represented the University of North Texas in intercollegiate wakeboarding competitions, demonstrating teamwork, discipline, and competitive performance.