

# PRALAY BHATTACHARJEE

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## EDUCATION

### University of North Texas

Major GPA: 3.86 / 4.0

### Bachelor of Science in Business Computer Information Systems

Expected Graduation: December 2025

- **Relevant Courses:** Data and Business Analysis, **Java**, Data Structure and Algorithm, **COBOL**, **Mainframe**, Business Statistics, **SQL**
- **Awards:** Dean's Excellence Award, President's List: Summer 2024, Fall 2024, Spring 2025, Dean's List: Summer 2023
- **Certifications:** IBM Z Xplore – Advanced Badge, IBM Project Management, MS Excel Specialist, AWS QuickSight for Business Analysts, Google Data Analytics Professional Certificate, SAP S/4HANA, AWS Cloud Computing

## WORK EXPERIENCE

### Information Technology and Decision Sciences, University of North Texas

Denton, Texas

### Teaching/Instructional Assistant – Data Visualization & Programming (Tableau, Power BI, Java and Mainframe)

May 2025 - Present

- **BCIS 3610 – Data Visualization (August 2025 - Present):** Accomplish 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, focusing on KPI design, actionable insights, and collaborative requirement clarification.
- **BCIS 3630 - OOP (May 2025 - Present):** Accomplish improved student performance for 120+ learners, as measured by up to **11.5% boosts in final grades through extra credit**, by **leading** academic support in Introduction to Java, aligning tutoring and grading with course objectives, facilitating hands-on learning in Java and IBM Mainframe tools (TN3270, ZXplore), and providing targeted feedback.

### University Brand Strategy and Communication, University of North Texas

Denton, Texas

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

July 2024 – August 2025

- **Accessibility Project Analyst Intern (Summer 2025):** Accomplished a 200% increase in user engagement and boosted QA and accessibility scores from 55% to 90%+, by auditing and optimizing 2,600+ College of Education webpages using Siteimprove and CMS tools.
- **Web Content Student Assistant (July 2024–August 2025):** Accomplished a 40% reduction in content errors and accelerated decision-making for site updates, as measured by improved site quality and responsiveness, by maintaining and enhancing 330+ UNT websites, resolving SEO and accessibility issues, managing stakeholder communications, and improving usability for 50,000+ users.

## 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

## PROJECTS

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

April 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)

April 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.

### Sales and Profit by Product Dashboard (Tableau, QuickSight, Excel)

August 2024 - December 2024

- Analyzed sales and profit data from the Superstore dataset to identify underperforming regions and product categories; built 4 Tableau worksheets and 1 dashboard using advanced filters, hierarchies, and KPIs, which revealed key profitability insights across 10 U.S. states.
- Faced with the challenge of making complex data accessible to non-technical users; designed a user-friendly dashboard integrating geospatial maps and dynamic visuals, enhancing stakeholder understanding and enabling more informed business decisions.

## LEADERSHIP & COMMUNITY INVOLVEMENT

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

August 2024 – Present

- Lead 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.

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

August 2021 – August 2023