

# Mahek Patel

(732)-810-9600 · [pmahek15@gmail.com](mailto:pmahek15@gmail.com) · <https://www.linkedin.com/in/pmahek15/> · North Brunswick, New Jersey

## Education

### Rutgers Business School

Bachelor of Science: Business Analytics Information Technology  
Minor: Business Administration | Concentration: Entrepreneurship

New Brunswick, New Jersey

Graduation: May 2025

GPA: 3.50/4.0

## Work Experience

### Residence Assistant

Rutgers University

New Brunswick, New Jersey

August 2023 – Present

- Generated and analyzed 200+ weekly reports tracking occupancy rates and resident satisfaction metrics for 1,500+ residents across 4 residential buildings, improving space utilization by 25% and reducing complaint response time by 40%.
- Managed 300+ monthly maintenance requests through ticketing system, collaborating with facilities team to achieve 95% resolution rate within 48 hours and maintaining 90% resident satisfaction score.
- Administered Rutgers Database System (Odyssey and Room-pact) for 1,500+ resident profiles, conducting monthly audits that improved data accuracy by 35% and reduced assignment errors by 80%.

### Data Analyst

Indian Cultural Center

Edison, New Jersey

May 2018 - Present

- Executed data entry validation and data analysis for high-profile events, ensuring accurate and organized data management while collaborating with cross-functional teams to streamline event logistics, increased operational efficiency by 20%
- Designed and implemented a custom database system tracking 5,000+ attendees across 50 annual events, reducing check-in time by 35% and eliminating duplicate entries by 95%
- Led a 4-person team in implementing automated backup protocols and recovery strategies, achieving 99.9% uptime and reducing data restoration time from 4 hours to 30 minutes
- Analyzed attendance data from 25+ monthly events across the Northeast Corridor, creating compelling infographics that identified market trends and drove a 40% increase in event participation

## Projects

### Healthcare Data Migration and Infrastructure Establishment Project

- Led a cross-functional team of 9 engineers in designing and implementing an AWS S3 data repository, resulting in 40% faster batch processing and establishing standardized data migration protocols across the organization.
- Architected and executed a critical data transformation project, converting legacy .MAC files to DDS format while implementing Infrastructure as Code (IaC) using Terraform, reducing deployment time by 60% and eliminating manual configuration errors.
- Engineered an end-to-end CI/CD pipeline for the Aage Mater model that automated testing, validation, and deployment processes, cutting release cycles from weeks to days and improving model accuracy by 25% through consistent build environments.

### Invoice Reconciliation and Damages Assessment

- Led the resolution of a complex \$50K+ invoice dispute with affiliate partners by conducting thorough analysis of projected versus actual work deliverables, ensuring contractual compliance and accurate billing reconciliation.
- Implemented a systematic review process to identify and document critical discrepancies between agreed terms and delivered work, successfully mediating conflicts and achieving final settlement within original agreement parameters.

### Patient Priority Algorithm

- Led a 4-member development team in creating a Java-based patient analysis system that reduced heart transplant candidate evaluation time by 65%, successfully processing medical records for 10,000+ patients and identifying high-priority cases with 98% accuracy compared to manual review.
- Architected and implemented a parallel processing algorithm aligned with Robert Wood Johnson's medical protocols, resulting in a 40% reduction in critical patient identification time and a 30% increase in successful early interventions, while maintaining HIPAA compliance and reducing false positives by 85% compared to the previous system.

## Technical Skills

- Programming Languages:** Python, Java, JavaScript, HTML, SQL
- Tools:** VS Code, Tableau, AWS S3, Adobe Premier Pro, Adobe Photoshop, Adobe Illustrator, Final Cut Pro, Adobe Audition, Audacity, Microsoft Office, Google Suite
- Certifications:** Datacamp Data Visualization in Tableau Introduction to Relational Databases in SQL

## Activities

**Involvement:** Youth Activities Coordinator at BAPS, Dance Instructor at Varnam Dance, Member of Business Information Technology Society Club, Asian American Identities Living Learning Coordinator, Former Lifeguard

**Personal Interests:** Public Speaking, Korean Dramas, K-pop, Photography, Vlogging, Calligraphy, Fashion, Basketball