


Report : Jamboree Education - Linear Regression

 Jamboree_Education_Linear_Regression.pdf

https://drive.google.com/file/d/1maJRwlQE36jujakg22OW_wewy_eiKTYb/view?usp=sharing

1. Key Drivers of Admission

High Impact (Focus Areas):

- **CGPA** – strongest predictor (most important)
- **GRE score**
- **Research experience**
- **TOEFL score**
- **Letter of Recommendation (LOR)**

Low Impact (Lower priority):

- Statement of Purpose (SOP)
- University Rating

Business meaning: Academic performance + test scores + research matter far more than essays or college brand.

2. Actionable Business Recommendations

Student Coaching Strategy

- Prioritize **CGPA improvement programs** (subject tutoring, academic planning).
- Invest more in **GRE preparation** (advanced test strategies, mock exams).
- Provide pathways to **research internships & projects**.
- Strengthen **LOR guidance programs** for students.
- Maintain TOEFL support, but as a secondary focus.

Resource Allocation

- Reduce excessive effort on SOP editing packages.
- Shift counselor time toward academic & test performance planning

Product Enhancement

- Build an **“Admission Probability Calculator”** for students.
- Show:
 - Current chance of admission.
 - What improvement gives maximum gain.

3. Additional Data to Improve the Model

Add:

- GRE section scores (Quant / Verbal / AWA)
- Undergraduate major & university tier
- Internship & project details
- Research Paper Publication count
- Years of work experience
- Financial background (for visa success modeling)

Result: Better personalization and higher accuracy.

4. Real-World Implementation Plan

- Deploy model as:
 - Internal counselor tool
 - Student web/mobile calculator
- Integrate with CRM.
- Retrain quarterly using new admissions data.
- Add dashboard for:
 - Prediction accuracy
 - Student progress tracking
 - Conversion analytics

5. Business Benefits of Improving the Model

- **Higher admission success rate** → stronger brand reputation.
- **Personalized counseling at scale** → lower cost per student.
- **Better student targeting** → higher conversion rates.
- **Optimized counselor productivity.**
- **Data-driven service differentiation** from competitors.
- Long-term: enables dynamic pricing & customized study plans.