STATEMENT OF PURPOSE (SOP) FOR JOINING THE ARTIFICIAL INTELLIGENCE COMMUNITY

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WHY AI? SPREADING AWARENESS AND BUILDING PRACTICAL MODELS

SPREADING AI AWARENESS:

- IMAGINE A WORLD WHERE EVERYONE UNDERSTANDS AI— NOT JUST AS A BUZZWORD, BUT AS A TOOL THAT CAN IMPROVE LIVES. THAT'S MY GOAL. I WANT TO CREATE AN AI– FRIENDLY ENVIRONMENT WITHIN OUR INSTITUTE.
- HOW? BY ORGANIZING WORKSHOPS, TALKS, AND INTERACTIVE SESSIONS.

BUILDING PRACTICAL MODELS:

- AI ISN'T JUST THEORY; IT'S ABOUT SOLVING REAL PROBLEMS. HERE'S MY PLAN:
 - **BLUEPRINTS**: IMAGINE DESIGNING AN AI MODEL LIKE AN ARCHITECT PLANS A BUILDING. *LINEAR REGRESSION FOR PREDICTING STUDENT GRADES, DECISION TREES FOR COURSE RECOMMENDATIONS, AND CLUSTERING FOR GROUPING RESEARCH INTERESTS.* THE ABOVE MENTIONED PLANS ARE SOME OF THE IDEAS THAT I HAVE IN MY MIND WHICH CAN MAKE LIFE OF PEOPLE IN THE INSITI EASIER.

- CONSTRUCTION: ARMED WITH PYTHON, TENSORFLOW, AND SCIKIT-LEARN, I'LL BUILD THESE MODELS (THOUGH I DON'T HAVE A VERY GOOD KNOWLEDGE IN THESE I KNOW WHAT TENSOR FLOE, SCIKIT-LEARN CAN DO). THE CODE WILL CRUNCH DATA AND MAKE PREDICTIONS.
- IMPACT: OUR INSTITUTE CAN BENEFIT FROM AI. PICTURE AN AUTOMATED SYSTEM THAT SCHEDULES CLASSES EFFICIENTLY OR AN AI CHATBOT THAT ANSWERS STUDENT QUERIES INSTANTLY (INSTI GPT).

GOALS: PRODUCTIVITY AND LIFELONG LEARNING

- **PRODUCTIVITY**: I'M NOT HERE TO TWIDDLE MY THUMBS. **MY GOALS**: **STREAMLINED PROCESSES:** IMAGINE AN AI-POWERED ASSISTANT HANDLING ADMINISTRATIVE TASKS—ALLOCATING RESOURCES, MANAGING SCHEDULES, AND OPTIMIZING BUDGETS.
- **ENHANCED STUDENT EXPERIENCE:** CAN AI PERSONALIZE STUDY RECOMMENDATIONS OR PROVIDE EARLY INTERVENTION FOR STRUGGLING STUDENTS? ABSOLUTELY!
- LIFELONG LEARNING: WHILE I WON'T HARP ON ABOUT SKILL DEVELOPMENT, I KNOW IT MATTERS. EACH PROJECT, EACH COLLABORATION—EXPERIENCE POINTS EARNED.MY WIDS PROJECT (THE FAKE NEWS DETECTOR) WAS JUST THE BEGINNING. I HUNGER FOR MORE CHALLENGES. MAYBE NEXT, SENTIMENT ANALYSIS OR GENERATIVE ADVERSARIAL NETWORKS (GANS)?

KNOWLEDGE: COURSERA AND REAL-WORLD APPLICATION

- COURSERA COURSES: I COMPLETED THREE COURSERA COURSES IN THE ML SPECIALIZATION. HERE'S WHAT I LEARNED:
- LINEAR REGRESSION: LIKE FITTING PUZZLE PIECES—FINDING THE BEST LINE THROUGH SCATTERED DATA POINTS.
- NEURAL NETWORKS: INTERCONNECTED BRAIN CELLS—DEEP LEARNING IN ACTION.
- DECISION TREES: A FLOWCHART FOR MAKING DECISIONS—PREDICTIVE POWER IN BRANCHES.
- **CLUSTERING:** GROUPING SIMILAR THINGS—LIKE ORGANIZING A MESSY CLOSET.
- **RECOMMENDER SYSTEMS:** THINK NETFLIX SUGGESTING YOUR NEXT BINGE-WORTHY SHOW.
- **REINFORCEMENT LEARNING:** AI LEARNING FROM TRIAL AND ERROR—LIKE TEACHING A DOG NEW TRICKS.

REAL-WORLD APPLICATION: FAKE NEWS DETECTION:

• LAST YEAR'S WIDS CHALLENGE WAS MY PROVING GROUND.

I BUILT AN AI MODEL TO DETECT FAKE NEWS ARTICLES. IT FELT

LIKE BEING A DIGITAL DETECTIVE.