**Budget Justification:**

Senior Personnel:

Principal Investigator, Dr. Abdullah Mueen, will be involved in all aspects of this research related to the statement of work. Funds are requested for one month of summer research for PI Mueen in each project year. Dr. Mueen’s current base salary is $9,804 per month. An escalation rate of 3% is estimated for each University fiscal year, which begins on July 1st.

Other Personnel:

Funding is requested for two graduate research assistants. One research assistant will work half-time during each academic year and full-time during the three summer months of each year, and the other research assistant will work full-time during the three summer months of each year. The base salary for a research assistant is $3,560 per month. An escalation rate of 3% is estimated for each fiscal year. The fiscal year begins on July 1st. Both of these students will assist with the research under the guidance of PI Mueen. The work plan described in the proposal has allotted more effort in the summer based on this student availability.

Funding is requested for one undergraduate student worker who will work 12 hours per week for 13 weeks at a starting rate of $12 per hour in the summer months of each year of the project. This student will assist with the research under the guidance of Dr. Mueen. The proposal explicitly describes the programming projects for undergraduate students, who will be paid at the above rate.

Fringe Benefits:

Fringe benefits for the summer salary of the senior personnel are calculated at the standard UNM rate for senior personnel of 22% for FY17 through FY21. The fringe rate for the graduate student research assistant is 1% plus health insurance coverage.

Equipment:

Funding is requested for a PowerEdge R730 server to continuously store data and perform compute intensive tasks locally. The server is a 16-core machine with 14.4TB storage. It is estimated that this machine will cost $13,048. A quote is attached.

Travel:

Funding is requested for the project personnel to travel to a domestic or international technical conference and or workshop in each year. The location and duration of this travel, which relates to the research project, will be determined as submitted papers are accepted. It is estimated that a domestic conference or workshop trip will cost approximately $1,500 per person for an average 3-day meeting/conference including airfare, hotel/meals, conference registration, and incidentals. It is estimated that the foreign conference trip will cost approximately $2,500 per person for an average 3-day conference including airfare, hotel/meals, conference registration, and incidentals. These estimates are based on past experience of similar travel. We plan on attending major data mining conferences including KDD, ICDM, SDM and web mining conferences including WWW, WSDM and ICWSM.

Tuition:

Tuition for the graduate student who works during the academic year is included for 12 credit hours per Fall and Spring semester. Tuition is estimated to cost $330.53 per credit hour for FY17, with an escalation rate of 6% per project year. Tuition is excluded from the indirect cost calculation and is listed on line G6 of the budget sheet.

Materials and Supplies:

Since this is a computer science research project, computer access is necessary to execute the research. Funding is requested in the first year to purchase two high-end workstations for the project personnel, at an estimated cost of $2,000 each. These workstations are essential for the project for data collection and analysis. Funding is requested in each year for computer supplies such as cables, small computer peripherals, storage devices, and incidentals related to proposed research costs.

Indirect Costs:

Modified Direct Costs are charged 51.5% for facilities and. This is the standard UNM rate for facilities and administration costs.