A&M's Outstanding Texan Began His Career Here

The road to success for Robert L. Smith Jr., a short little man at A&M, has been brief—but perhaps a mite bumpy.

Smith recently pocketed the title of one of five outstanding young Texans for 1961, an award sponsored annually by the Texas Junior Chamber of Commerce.

The 34-year-old former Nederland resident has won national recognition for his development of a first class Data Processing Center here, where he also serves as an associate professor in Industrial Engineering.

Smith was cited by the Texas Jaycees for the establishment of a mathematical technique for computing radiation patterns produced by radium needles.

The citation also mentioned Smith's creation of computing methods for forecasting hurricane storm waves and traffic flow patterns, in addition to development of a Data Processing Center second to none on a college campus.

Smith has only a bachelor's degree on a campus where doctorates are commonly accepted as essential, but he has no plans for advanced formal schooling simply because no degrees are offered in his line of work.

Smith collected his bachelor's degree in 1952 after he first entered A&M as a 16-year-old freshman in 1944. He withdrew from college in 1945 after a nervous "breakdown."

His flair for computing machines got its start during a tour of duty with the U.S. Army, where he learned to repair computing machines.

So, when he returned to A&M in 1949 as a student and part-time worker in the IBM room of Agriculture Experiment Station, Smith's major changed from civil engineering to electrical engineering.

The day after he graduated, Smith was employed by A&M as a statistical supervisor with the Texas Agricultural Experiment Station. Five years later, he became head of the newly established computing center, along with teaching duties in the Business Administration Division.

When the Data Processing Center was established in 1958, Smith was placed in charge. In September 1959, he assumed an additional title as associate professor of Industrial Engineering.

Today, the Data Processing Center, under Smith's direction, solves computational problems of researchers, students and industry throughout the south.

The center itself is a modest, modern $300,000 building with rigid temperature and humidity controls to assure against malfunction of the intricate mechanism. The structure was designed specifically for a computing facility.

The equipment on the inside, however, is a complicated collection of gadgets valued at more than $4 million. Included are IBM 709, 650, and 604 digital computers and an analog computer.

Just what does one of the machines do?

The 709 can store 32,768 facts or 10-digit numbers and can recall the items at the rate of 80,000 per second, Smith pointed out.

The machines 'thinks' at a speed of 12 microseconds (12 millionths of a second) and can perform 40,000 arithmetic operations per second.

Computers at A&M, among other assignments, have provided Houston's M.D. Anderson Hospital answers in a matter of hours regarding the dose of radiation administered cancer patients.

Without the computers, it would probably take weeks to get this information. The treatment project is a pet project of Smith's.

Born in Houston and educated in Nederland, Smith considers the Data Processing Center unmatched by any other educational institution.

Smith, however, dispells the theory that the computers are "mechanical brains" waiting to replace the human race.

Computers seem to think, he said, but actually all they do is follow instructions. It takes a perfect question to get a perfect answer.

Outstanding Aggie and Texan
Robert L. Smith Jr., associate professor in industrial engineering and head of the Data Processing Center, has been named by the Texas Junior Chamber of Commerce as one of five outstanding young Texans during 1961. He was cited by the Jaycees for the establishment of a top notch computing center, along with research projects. (Texas A&M Photo)