

## **Matt Barry**

Matt Barry likes projects, math and software. Matt is a senior computer scientist and project manager at Kestrel Technology in Palo Alto, California, where his focus is on software verification and certification. He is the principal investigator on four active projects: the NASA CertWare argument-based safety assurance project; the AFRL static analysis of numerical methods project; the DARPA CircuitBot crowd-sourced formal verification project; and the NASA dissimilar analysis tool chain property integration project. Matt also operates a small software consulting practice and an investment advisory business specializing in quantitative analysis and alternative investments.

Prior to these current projects, Matt was involved in NASA's human and robotic space programs for 20 years. He was a Space Shuttle mission controller for orbiter propulsion systems with Rockwell Space Operations. He managed the advanced technology development department for mission operations at United Space Alliance. He was deputy director of the mission information technology program office at the Jet Propulsion Laboratory. He was program director for destination surface systems in the Exploration Program at NASA Headquarters, and also served there as the manager of the Concept Exploration and Refinement program and subsequently manager of the Constellation Program's software and avionics system integration group. Matt was a member of the NASA Advisory Board Subcommittee on Software, Avionics, and Cybersecurity. Taking a year away from NASA service, Matt won a national competition for a AAAS/Sloan Foundation Science and Engineering Fellowship and served the fellowship at the White House Office of Science and Technology Policy.

Matt has four degrees from Rice University: a BSME, MS, PhD and MBA. His primary emphasis in engineering studies was computational fluid dynamics and heat transfer. He holds certificates in strategic decision and risk management and in advanced project management from Stanford University. He holds a professional engineer's license, a Series 65 investment advisor license, and the Chartered Alternative Investment Analyst credential.

Matt has won several awards for engineering performance in the national space program including the Rockwell International Engineer of the Year, the Rotary National Award for Space Achievement, Rockwell Houston Operations Engineer of the Year (twice), Rockwell President's Award, and Rice University's Outstanding Young Engineering Alumnus Award.

Matt's involvement with the faculty and students of the TTU CS department in fact began at the UTEP CS department. Matt many years ago sponsored several NASA-related R&D projects at UTEP which later migrated to TTU along with Drs. Gelfond and Watson. These colleagues have been developing project ideas for many years and are still working together, now including Dr. Rushton as well, on active projects with DARPA and NASA. Matt and his wife Rebecca are the lucky parents of two-and-a-half-year-old twins Robert and Rachel.