



Microprocessor Prototyping For Non-Technical Inventors

Jim Brakefield

Jim Brakefield, a semi-retired electrical engineer, has worked as a research and design engineer throughout a 50 year career and will provide a basic understanding of how even non-technical inventors can prototype microprocessors for use on their inventions.

Do you need a microprocessor to operate or control data collection and possibly connect to the internet through a wireless connection for your invention? Jim will present a short history of microprocessors and follow with descriptions of currently available user friendly microprocessors. As an example, the Arduino form factor and software toolkit available today make real-time embedded microprocessor programming, control and operation accessible to the young and non-technical inventors.

Considerable variety exists in the small microprocessor boards and kits targeted towards prototyping. Examples of each genre will be described, shown and demonstrated along with an assortment of microprocessor peripherals for data input and output. Jim will demonstrate user friendly microprocessors such as the Raspberry Pi, Arduino and the ESP32. He will boot and show installed software, download and operate a robot, and alter patterns of blinking lights via modifying simple Arduino code. Jim will provide names of tutorial books on the Arduino and Raspberry Pi microprocessors and handouts of the presentation slides which include web addresses of applicable microprocessor information.

Along the way Jim did a patent on floating-point arithmetic (cited by 63 other patents), scientific data analysis and visualization, circuit board design, FPGAs and programmed a number of distinct microprocessors for real-time embedded applications. He has contributed novel microprocessor designs to opencores.org. He has 60+ publications and/or presentations, some of which are occasionally cited in published papers.

Also, please take this opportunity to pay your annual dues (\$25/\$95 Corporate), thanks!

Wednesday, January 10, 2018

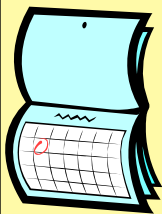
5:30-6:30 Networking 6:30-8:00 PM - Presentation

San Antonio Technology Center

3463 Magic Drive

(North of I-410 Between Callaghan and Fredericksburg Roads)

Public Invited



Alamo Inventors, a Special Interest Group (SIG) of Technology Connexus Association, is a non-profit organization made up of local area engineers, business people, professionals, students, faculty and people from all walks of life. Anyone interested in inventing and/or business and product development is welcome to attend and become a member.

For more information visit:

www.alamoinventors.org

