# FRANK MERRITT BRASWELL

220 W. McCabe Ave. Upland, IN 46989 765•760•1638 http://www.systemsofmerritt.com

# **EXPERIENCE:**

Management: Project Specifications, Grant Writing, Proposal Writing, Social Media Development & Marketing, Hardware and Software Project Management, Budgeting, Equipment and Parts Procurement, Patent Considerations, Engineering Validation Testing

**Computer Languages and Operating Systems:** Objective C, Swift, Processing Language, Perl, PostScript Language, Easy Language, C Language, Pascal, FORTRAN, APL, PL-I, Symphony, Assembly Language (Z80, 8086, 8089, V40), Unix, CP/M-86, VRTX, MS-DOS, Data General AOS, CDC Cyber NOS, VAX VMS

Hardware: iPhone, Electric Imp, MSP430, eZ430-RF2500, Delta RMC Controllers, Maple Systems Display Panels, V40, 8086, 8089, Z80, Multibus, PC Bus, Altera Programmable Logic Devices, Transducers (displacement, pressure, temperature, acceleration, magnetic), Optical Encoders, High Density LCDs

**Development & Test Systems:** Apple Xcode, IAR Embedded Workbench, Delta RMC Tools, EasyBuilder 5000, NI LabView, NI Multisim, Autodesk Inventor, Aoyue 2702 SMT Rework Station, Tektronix 8561 Microprocessor Development System, Sophia Systems V40 Emulator, Tektronix 1240 Logic Analyzer, Tektronix DAS, FutureNet DASH Schematic Designer, Altera A+Plus

Short Courses Attended: Grant Writing, Business and Technical Writing, Managing Personal Growth, Building Influence Effectiveness, Basic Well Logging, Seismic Domain, Seismic Processing, Digital Control Systems, Digital Signal Processing

# **EDUCATIONAL RECORD:**

M.S. in Electrical Engineering received 5/81, University of Illinois, GPA = 4.742/5.0

B.S. in Physics/Math received 4/78, Jacksonville University, GPA = 3.954/4.0, Graduated Summa Cum Laude

Attended Oral Roberts University, 9/73-5/75, GPA = 3.356/4.0

# **EMPLOYMENT HISTORY:**

Systems of Merritt, Inc.: President, Mobile, AL, Dallas, TX, Upland, IN, 5/89-Present

iPhone Products 2009-2011: Will Rogers Daily Quotes, Spurgeon Daily Quotes, Psalm Daily Quotes ESV, Psalm Daily Quotes NIV, Psalm Daily Quotes KJV, Psalm Daily Quotes NASB, Psalm Daily Quotes ASV, Psalm Daily Quotes NKJV; See Systems of Merritt Product Blog for more information. Pumper's Friend\*, Empire Avenue Tips for The Chris Voss Show, 6-2011 Grant: Stripper Well Consortium (SWC) 2010-2011, Smartphone [iPhone] Software Program for Pumpers/Well Tenders; See the <u>SWC Grant Project Blog</u> for details on the development of the Pumper's Friend iPhone app. Social Media Development & Marketing Facebook, Twitter, LinkedIn, & Google+ & Wordpress blogging platform development

Social Media Development & Marketing Facebook, Iwitter, LinkedIn, & Google+ & Wordpress blogging platform development & marketing activities.

Authored and Published Inside Postscript, 1989; LaserCheck Software, 1991; Advanced Postscript Error Handler, 1989. Publishing Industry Short Courses Developed and Presented: PostScript Concepts 1990-1995, Practical Imaging 1995 Contract Clients: Impact Technologies, WellMark, Hallmark Cards, Friesens, PIA/GATF, EPSON, MGI Color, E-Spec, Wellness Works, Berry Plastics, Lockheed Missiles and Space Company, Inc. View <u>Systems of Merritt Projects</u> for details. Patent Litigation, Expert Witness on PostScript Language Publishing Matters: Harlequin (Global Graphics), ECRM defendants, 97-98; RR Donnelley, plaintiff 2007, RR Donnelley, defendant 2008

## Impact Technologies LLC: Consulting Engineer, Tulsa, OK, 1/09-3/10

Specified, designed and built controllers for high-power servo-hydraulic and electric motor systems used in oil production systems. The controllers were based on Delta Motion Systems hardware and included touch screen graphical interfaces.

## Taylor University: Assistant Director, Center for Research and Innovation, Upland, IN, 7/06-5/08

Assisted with grant administration, writing and research. Grant agencies worked with included Lilly Foundation, NASA, NSF, Stripper Well Consortium (SWC), Air Force Research Labs (AFRL), Office of Naval Research (ONR) and Indiana Space Grant Consortium (INSGC). Managed, designed and implemented hardware and software for SWC grants involving downhole data acquisition and logging.

## Taylor Publishing: Principle Engineer, Dallas, TX, 12/95-3/98

Developed and deployed yearbook printing workflow acceleration software and systems. This included plug-ins for Adobe products to enhance operator handling of yearbook pages, and PostScript language file processing to automatically insert images into yearbook pages.

# QMS: Member Technical Staff, Mobile, AL, 8/87-5/89

Established engineering validation test procedures and bug reporting for QMS PostScript laser printers including JetScript, CanonScript, PS 800+, PS 800II, PS 810, PS 820, PS 1500, ColorScript 100, and PS 2200. This included engineering testing through alpha and beta software releases, plus working with customer service, sales and marketing as products were introduced. Other responsibilities included resolving product problems with outside software suppliers and vendors such as Hewlett-Packard, Canon, NBI, and Adobe Systems.

## VBI: Project Director, Broken Arrow, OK, 6/86-6/87.

Conducted the technical research and helped write the proposal for a hand-held computer Bible project In 12/86 we received venture capital funding and formed VBI Managed the efforts of two C Language programmers and a technician, plus designed all the hardware for the hand-held computer Bible. Specified the VRTX real-time operating system and assisted the programmers with its implementation. The project was carried through proof of concept with the construction of three engineering prototypes. Equipped a microprocessor development lab with over \$60,000 of test equipment.

## Conoco: Research Engineer, Ponca City, OK. 6/81-5/86.

Designed and field tested microprocessor-based servo-hydraulic control systems for three different land seismic sources. Designed and field tested a special purpose microprocessor-based sweep generation system for a marine seismic source. The above multiple microprocessor systems were based on an 8086 single board computer and custom 8089 data acquisition boards which I designed. Wrote the system software in C Language and assembler and used VRTX as my real -time operating system. Equipped a digital electronics lab with over \$200,000 of test equipment including a microprocessor development system.

#### University of Illinois: Research Assistant/Teaching Assistant, Urbana, IL, 8/78-5/81.

Designed, built, and tested a rocket-borne microprocessor system to collect energetic particle data in the upper atmosphere. Wrote the system firmware in Z80 assembly language. Three identical systems were flown during the Energy Budget Campaign in Kiruna, Sweden in the winter of 1980. Post processing of the flight data was also completed.

## Oral Roberts University: Programmer-Analyst, Tulsa, OK, 5/78-8/78.

Wrote PL-I and FORTRAN programs on a Data General Eclipse Minicomputer, which became part of the ORU budgeting and inventory software systems.

# Jacksonville University: Computer Lab Assistant, Jacksonville, FL, 6/77-4/78.

Assisted students with FORTRAN and APL programming projects on an IBM 370.

#### Creations of Merritt: Owner, Manager, Master Leather Craftsman, Tulsa, OK, 9/74-9/76.

Established the business in a commercial location at the beginning of my sophomore year at ORU. Closed the business to complete my education.

# **PATENTS:**

Four Invention Conception Reports were submitted while at Conoco. One utility patent was filed. One design patent was filed while at VBI.

United States Patent 4,857,919, Method and Apparatus for Indicating the Position of a Variable Differential Transformer.

# **PUBLICATIONS:**

Rocket Measurements of Energetic Particles in the Midlatitude Precipitation Zone, with RD. Voss and L.G. Smith, COSPAR Space Research, Bangalore, India, Vol. 8, p. 149-152, 1980

Rocket-Borne Microprocessor-Based Experiment for Investigation of Energetic Particles in the 0 and E Regions, with L.G. Smith, Aeronomy Report 96, Department of Electrical Engineering, University of Illinois, Urbana, Ill., Library of Congress ISSN 0568-058 1, 1981

Inside PostScript, Mobile, Alabama: Systems of Merritt, Inc. and Peachpit Press, Inc., 1989, ISBN 0-938151-10-X, 302 pages.

Advanced Postscript Error Handler, Mobile, Alabama: Systems of Merritt, Inc., 1989.

LaserCheck, Mobile, Alabama: Systems of Merritt, Inc., 1991.

# **ACTIVITIES:**

Member: Stripper Well Consortium (SWC)

Honorary and Technical Societies: Sigma Pi Sigma

Awards: Outstanding Young Men of America, 1985

Social and Other Extracurricular Organizations:

Upland Community Church, Stewardship Committee Substitute Physics teacher at The King's Academy Scout Master Troop 125, Dallas, TX

# **REFERENCES:**

Available upon request.