

PIERCE K. SANFORD

1665 Clover Circle
Melbourne, FL 32935

(321) 752-0880
sanfordp@cfl.rr.com

Talented young professional with skills & training for:

ELECTRICAL ENGINEERING ~ MECHANICAL ENGINEERING

Quick learning with a solid theoretical and hands-on knowledge base encompassing the entire spectrum of electrical and mechanical engineering concepts. Motivated team player with strong interpersonal, analytical and mathematical skills. *Experience and academic preparation include:*

- Fluid Mechanics
- Thermal Systems
- Machine System Design
- Control Systems
- Electronics
- Software / Hardware Design
- Microcomputer Systems
- Communication Systems
- Computer-Based Analysis
- Engineering Thermodynamics
- Materials
- CAD (ProE, Microstation & AutoCAD)
- Engineering Economy & Planning
- Mechanical Engineering Design
- Electromagnetic Waves
- Microelectronics Fabrication & Laser
- Electrooptic Devices & Systems
- Fiber Optics
- Heat Transfer
- Welding
- Machining
- Circuits
- Signals & Systems
- Electronic Devices
- Microwaves
- LabView, MATLAB, C++
- Digital Logic

EDUCATION

Bachelor of Science in Mechanical Engineering University of Florida, Gainesville, FL - 2004
Bachelor of Science in Electrical Engineering University of Florida, Gainesville, FL - 2002

RELEVANT EXPERIENCE & EMPLOYMENT

Engineering Student, FT	Univ. of Florida, Gainesville, FL	1998 to 2004
Lab Tech, Microelectronics	Univ. of Florida, Gainesville, FL	2001 to 2002
Engineering Intern	Cenetec, Gainesville, FL	2000 to 2001
Lab Tech, Dynamics Systems	Univ. of Florida, Gainesville, FL	1999 to 1999
Installation Tech	Your Custom Counter, Orlando, FL	1997 to 1998

- **Microelectronics Design & Fabrication:** Designed and fabricated a hydrocarbon fuel pretreater apparatus for University of Florida Microelectronics Lab. Assembled PCs for data acquisition.
- **Tooling Design & Troubleshooting:** Designed tooling fixtures for instrumentation product line at Cenetec. Troubleshot various tooling problems on the production line.
- **Analysis:** Performed a power consumption analysis of University campus through Dynamics Systems Lab.
- **System Design:** Facilitated leadership for senior project involving mechanical and electrical engineering to design and construct a fuel-efficient vehicle for the international engineering challenge competition.
- **Computer Design:** Designed and constructed an onboard vehicle PC (personal computer) to provide audio, video, GPS, internet, and other wireless networking capabilities for portable audio link (PAL) electrical senior project.
- **Electrical System Installation:** Performed electrical installations for colleagues, friends, and personal use; emphasis on competition car audio. Handled system planning including power considerations, performed series and parallel wiring, and troubleshot and resolved system and component problems.
- **Digital Logic:** Gained knowledge in the design of specialized processors. Performed hands-on logic simulation and hardware implementation in Digital Logic course.
- **IT Communications & Design:** Studied network architecture, wireless communications, satellite networks, and UNIX network programming. Designed simple computer architectures in Computer Design course.
- **Microelectronic Fabrication:** Studied semiconductor materials and physics, electrons and holes, diodes, bipolar transistors, and field effect devices in Electron course. Fabricated and tested integrated circuits.
- **Electro-Optics:** Completed study of fiber-optic devices used in electronic systems to include lasers, light emitting diodes, photodetectors, CCD arrays, liquid crystal displays, and optical fibers.