#### WAYNE A. JONES

1706 Barton Springs Ct. Allen, Texas 75002 Phone: 972.359.9437 Email: wjones@cccd.edu

#### EXPERIENCE:

# <u>Director and Professor - Engineering Technology 2001 to present</u> Collin County Community College District, Frisco, TX

- Instruct electronic engineering courses such as telecommunications systems including telephone/telephony systems, high speed data networks, DSL, cable modem access, ISDN, PBXs, DC and AC circuits, fiber optic networks, DWDM (Dense Wave Division Multiplexing), LAN/WAN topologies along with semiconductor manufacturing courses.
- Directing a task force to investigate the processes and requirements necessary for departmental ABET accreditation.
- Developed curriculum and courseware to support a new program in optical engineering technology.
- Supervise ET laboratories and lab assistants.
- Serve as acting dean during the absence of ET dean.
- Assisted ET dean in the creation and justification of the ET budget as it relates to electronics and telecommunications.
- Coordinate the Electronics, Semiconductors, and Telecommunications program areas.
- Schedule ET semester course offerings and assign faculty to course sections.
- Establishing the first student chapter of IEEE (Institute of Electrical and Electronic Engineers) at CCCCD expected student participation from electronics and computer networking students.
- Implementing the Texas Higher Education Coordinating Board's (THECB) field of study
  programs in engineering technology (A.S. Electronic and Computer Engineering Technology)
  and engineering (A.S. Engineering).
- Cultivating key contacts at SMU, UTA, UNT, and UTD to facilitate seamless articulation
  agreements that allow ET graduates to matriculate to 4 year engineering and engineering
  technology schools.
- Working with officials in the SMU engineering department to become the first community college in the metroplex to implement the Infinity Project.
- Serve on search committees and assist the ET dean in the hiring of faculty and technical staff."
- Marketing and promoting the division and university at various events.

# Software Development Engineer - Technical Lead 1997 to 2001 Alcatel USA, Plano, TX

- Integrated, tested, and developed broadband (softswitch) next generation voice/data telecommunications switching networks featuring Voice over IP, Voice over ATM, Fast Ethernet, Gigabit Ethernet, access/trunking gateways.
- Designed and developed network tools and instrumentation that facilitated a 100% desktop testing environment for call processing (MegaCo/MGCP, SS7, OC3, SONET, ISDN, X.25, InBand, T1/E1) engineers.
- Performed software/hardware installation, implementation, and testing of new software package releases on internal and external customer sites including customer training and post installation support.
- Administered network including software/hardware configuration management for Alcatel's development and test internal telecommunications switching network.
- Received numerous incentive awards for outstanding technical contribution and consistently ranked as an "exceeding expectations" performer and "excellent" team player by supervisor.

### Graduate Research Engineer, 1993 to 1997

# Center for Advanced Microstructures and Devices (LSU), Baton Rouge, LA

- Conducted X-ray and ultra-violet optical lithography and processing of semiconductor wafers within a Class 100 clean room facility.
- Researched and characterized the physical transport mechanisms and surface effects
  of III-V advanced semiconductor systems such as InAlGaAs/InGaAs Hetero Junction
  Bipolar Transistors (HBTs).
- Utilized synchrotron light source to research and design sub-micron and micro-electro-mechanical systems (MEMS).
- Investigated and developed pressed and thick photo resist technology reported results at annual symposium.

## Management (Ameritech Scholar), 1990 to 1991

#### Ameritech, Milwaukee, WI

- Designed and implemented computer programs utilizing database management software and Bellcore's Trunks Integrated Record Keeping System (TIRKS).
- Generated reports on central office frame fill that are beneficial in forecasting future inventory requirements and capital investment.
- Assessed and evaluated new and emerging information technology software and systems.

#### **EDUCATION:**

### Master of Science in Electrical Engineering, 1996

Louisiana State University, Baton Rouge, LA

- Completed advanced courses in optical electronics and lithography.
- Published 200 page master's thesis and several papers on advanced high speed semiconductor devices for communication systems.
- Taught (2 years) mathematics to inner-city grammar school students in afternoon program sponsored by LSU school of engineering.

### Bachelor of Science in Electrical Engineering, Cum Laude, 1992

Southern University and A&M College, Baton Rouge, LA

Chapter President – Mathematical Association of America.

### Honor Student, Pre-Engineering Program, 1989

Nicholls State University, Thibodaux, LA

- Taught (3 years) freshman English and mathematics students in program sponsored by the JTPA (Job Training Partnership Act).
- Served (2 years) as a youth counselor for middle school aged students in summer program sponsored by the JTPA.

#### SKILLS:

### **Test/Design Tools**

 Optical Metrology, Microscopes (SEM), Optical Test/Characterization Instrumentation, INET, MGTS, SPICE, SAGE, MathCad, Semiconductor Processing Equipment, Spectrum Analyzer, Frequency Counters, Tone/Signal Generators, Oscilloscopes.

#### Programming Languages

• C++, HTML, Assembly, Basic, Fortran.

#### **Operating Systems**

• Windows, Windows NT, UNIX, HP.

# ORGANIZATIONS and CERTIFICATIONS:

# IEEE (Institute of Electrical and Electronics Engineers, Inc.) - GOLD Member Rank

- IEEE Lasers and Electro-Optics Society.
- IEEE Computer Society.

# Alcatel Leadership Association (National Management Association)

Membership Booster (2000 – 2001).

## Toastmasters International (Communication and Leadership)

- Lt. Governor Marketing (2000-2001).
- Alcatel Club President (1999 –2000) [President's Distinguished Recognition].
- Area 24 Governor (1999 2000) [President's Distinguished Recognition].
- Vice President Education (1998 1999) [Select Distinguished Recognition].
- Assistant Area 24 Governor (1998 1999) [Select Distinguished Recognition].
- Competent Toastmaster (CTM) and Competent Leader (CL) Award.

#### Passed Fundamentals of Engineering Exam

## FCC Radiotelephone License with Ship's Radar Endorsement

#### HONORS/AWARDS:

- Numerous Alcatel Incentive Awards for Outstanding Technical Achievement.
- Eta Kappa Nu (Electrical Engineering Honor Society).
- Phi Alpha Theta (History Honor Society).
- Alpha Lambda Delta (Academic Honor Society).
- Phi Eta Sigma (Academic Honor Society).
- President's and Dean's List (numerous times).
- · Chancellor's Scholar Award.
- Sociology Research Award (Presented paper at Mid-South Sociological Conference).
- · Sophomore of the Year Award.
- Ameritech Scholar.
- Minority Leadership Award.
- National Engineering Award.

#### PAPERS:

N. Valsaraj, R. Sabbah, W. Jones, K. Ikossi-Anastasiou, "Performance of InAlGaAs/InGaAs HBTs with Tunneling AlAs Barrier Layer", <u>High Speed Semiconductor Devices and Circuits</u>, 1997. Proceedings., 1997 IEEE/Cornell Conference on Advanced Concepts, pages 154—163.

K. Ikossi-Anastasiou, W. Jones, R. Sabbah, N. Valsaraj, "Emitter Size Effects in High Speed Semiconductors," System Theory, 1997., IEEE Proceedings of the Twenty-Ninth Southeastern Symposium on System Theory, 1997, pages 410 – 414.

W. Jones, "Emmiter Size Effects in InAlGaAs/InGaAs Heterojunction Bipolar Transistors," Master's Thesis, LSU Press, December, 1996, 206 pages.

N. Valsaraj, R. Sabbah, W. Jones, K. Ikossi-Anastasiou, C.S. Kyono, S.C. Binari, W. Kruppa, and H. Dietrich, "High-Speed Semiconductor Devices for Communication Systems," <u>System Theory</u>, 1996., <u>IEEE Proceedings of the Twenty-Eighth Southeastern Symposium on System Theory</u>, 1996, LSU, Baton Rouge, LA, pages 353 - 357.

W. Jones, "Thick and Pressed Resist Processing and Technology," <u>Proceedings of the First CAMD Symposium on Science and Technology</u>, Baton Rouge, LA, 1995, 5 pages.

C. Johnson, Jr., E. Arvie, and W.Jones, "A First Lesson on the Integers Inspired by the NCTM Standards," <u>Journal of Texas Mathematics Teachers</u>, 1994 (Publication Accepted).