

# Rollins Turner

## EDUCATION

- PhD**            **Computer Engineering, University of Massachusetts, Amherst, 1982**
- MS**            **Computer Engineering, Northeastern University, 1973**
- BA**            **Mathematics, University of New Mexico, 1965**

## EXPERIENCE

### **August 2004 - Present**

#### **Instructor, University of South Florida, Tampa, FL.**

Teach senior level undergraduate courses in Software System Development and Web Application Design (ASP.NET, C#, JavaScript, Ajax, MS SQL), as well as introductory courses in C programming.

### **July 2003 – July 2007**

ASP.NET web site development for clients using C#, VB, JavaScript, Ajax, and MS SQL Server.

### **April 1998 – June 2003 Paradyne Corporation, Largo, FL.**

Defined software architecture for the BitStorm 4800 Stackable DSL Access Multiplexer. Led day to day work of a group of five senior software engineers over a five month period. Produced a 100+ page document specifying all major software components and their interfaces.

Wrote requirements specification for the Paradyne DSL Router.

Participated in implementation of software for multiple Paradyne networking products (routers, DSL access multiplexer.)

### **1997 – 1998 Raytheon St. Petersburg, Florida**

(Also February – December 1995)

Helped extend the network architecture of the "Data Distribution System" (DDS) to support significantly larger networks. DDS is a realtime data communications network based on microwave radio and phased array antenna technology. Worked to infuse concepts from ATM into the DDS development community . Wrote tutorial on ATM and how the concepts might be applied to DDS. Wrote proposals for new services to be provided by DDS.

Worked with other team members to develop distributed algorithms for routing and transmission scheduling, to replace the Global Scheduler (described below.) Produced a 128 page technical memorandum specifying the new architecture.

Wrote a trace driven simulation program for evaluation of alternative routing and scheduling algorithms.

### **1996 Independent Software Developer**

Developed a web site to provide order entry to restaurants for takeout and delivery.

**April 1993 – July 1995 Loral Data Systems, Sarasota, Florida**

Participated in development of software for an ATM/Frame Relay switch. Wrote document specifying functional requirements and algorithm for connection setup. Participated in the design and implementation of the software.

Participated in specification of ATM traffic policing and call admission control. Did a complete redesign and reimplement of the routing software.

**1986 – 1993 E-Systems (Now Raytheon) St. Petersburg, Florida**

Participated in the development of software for DDS Version 2.1. Served as liaison between ECI and a group of developers at the Johns Hopkins Applied Physics Laboratory (JHU/APL) in Laurel, Maryland. For approximately six months, commuted between ECI and JHU/APL on a biweekly basis, while serving as a member of the team that developed the "Global Scheduler." This critical component of DDS determines the routes that data takes from every source to every destination and the precise timing of when data from every source is transmitted over every link.

Participated in development of DDS Version 2.0. (This was the first version of DDS that provided networking functionality.) Played a key role in design of the network architecture. Participated in specification of software requirements.

Participated in development of a message communication system that utilized multiple communications media. Played a major role in definition of the network architecture, including specification of how to interface new network services to clients running DECnet, and design of a multilevel flow control algorithm.

**1983 - 1986: Assistant Professor, University of South Florida, Tampa, FL.**

Taught graduate courses in Computer Networks, Computer Architecture, and Queueing Theory. Supervised and conducted research in performance analysis of local area networks.

**1970 - 1983: Digital Equipment Corporation, Maynard, MA.**

Held various positions in engineering, research, and education. Developed and taught Digital's original course on operating system internals. Conducted Digital's earliest work in the area of performance evaluation. Occasionally taught customer seminars on computer networks and local area networks.

**1966 - 1970: Communications Officer, U.S. Air Force**

Taught courses in communications, electronics, and computer operating systems.