

EDUCATION

Columbia University, Graduate School of Arts and Sciences, New York, NY

Ph.D., Electrical Engineering, October 2007.

Thesis Title: Seamless Downloading in Synchronous Cache Networks.

Advisor: Professor E. G. Coffman, Jr.

Master of Philosophy, Electrical Engineering, February 2005. **GPA:** 4.00/4.00

Columbia University, School of Engineering and Applied Science, New York, NY

Master of Science, February 2003. **GPA:** 3.71/4.00

Major: Electrical Engineering, **Concentration:** Multimedia Networking.

Bachelor of Science, Summa Cum Laude, May 2001. **GPA:** 3.85/4.00

Major: Electrical Engineering, **Minor:** Economics.

HONORS

Extraordinary Teaching Assistant Award (Spring 2002, Spring 2003)

The William L. Everitt Student Award of Excellence (2001)

Tau Beta Pi Engineering Honor Society (Inducted in 2000)

Golden Key International Honour Society (Inducted in 2000)

Theodosios and Ekaterine Typaldos Scholar (2000 - 2001)

Fulbright Scholar (1997 - 2001)

EXPERIENCE

*Fall 2001, Spring 2002,
Spring 2003, and
Spring 2007*

Columbia University, Department of Electrical Engineering, New York, NY

Graduate Teaching Assistant

- Courses: Modeling and Performance Evaluation of Computer Systems, Probability, Communication Theory, Computer Networks, and Introduction to Electrical Engineering.
- Conducted recitation sections, assisted students with homework, and graded examinations.
- Ran undergraduate electrical engineering lab.

*June 2002 –
December 2006*

Columbia University, Department of Electrical Engineering, New York, NY

Graduate Research Assistant

- Developed optimal algorithms for efficient content distribution in co-operative caching networks that ensured strict Quality of Service guarantees in terms of downloading delays.
- Evaluated the performance of search and replication algorithms in peer-to-peer networks through extensive simulations.

Summer 2001

Telcordia Technologies, Operations Solutions Consulting Group, Red Bank, NJ

Summer Intern

- Contributed in the setup of a Data Network Operations Center (DNOC) lab used to emulate a customer's operational environment for the purpose of demonstrating Telcordia's Operation Support Systems (OSSs) software.
- Researched Voice over DSL (VoDSL) technology in order to create the process flows to support VoDSL Service Activation, Service Assurance, and Network Creation.

*Spring 2000,
Spring 2001*

Columbia University, Department of Electrical Engineering, New York, NY

Undergraduate Lab Assistant

- Guided undergraduate students in their weekly laboratory experiments.
- Graded laboratory reports and weekly homework assignments.

Summer 2000

MarkeTrends Financial Services, Larnaca, Cyprus

Assistant Analyst

- Assisted in technical analysis of the CSE general index and individual securities.
- Prepared and updated client portfolios and warrant valuation spreadsheets.

*July 1995 –
August 1997*

Cyprus National Guard, Cyprus

Second Lieutenant

- Supervised and trained a company of 40 soldiers.
- Handled highly confidential information and strategic plans.

COURSEWORK

Computer Communication Networks, Networking Laboratory, Wireless and Mobile Networks, Ad-hoc and Sensor Networks, Broadband Networks, Digital Signal Processing, Wireless Communications, Communication Theory, Information Theory, Modern Digital Modulation Technologies, Stochastic Signals and Noise, Modeling and Performance Evaluation of Computer Systems, Modeling and Analysis of Random Phenomena, Queueing Networks, Data Structures, Analysis of Algorithms, Deterministic Scheduling Models, Intermediate Microeconomics, Intermediate Macroeconomics, Introduction to Econometrics.

SKILLS

Languages: Fluent in both English and Greek

Computer Languages: C, HTML

Operating Systems: Windows, Unix, Linux, Mac OS

Software: Matlab, Mathematica, Microsoft Office

Hardware: Cisco Routers (2600 Series)

PUBLICATIONS

- Coffman, E.G., Jr., Constantinides, A., Rubenstein, D., Shepherd, B., and Stavrou, A. “*Content Distribution for Seamless Transmission*”. In SIGMETRICS Performance Evaluation Review 32(2): 31-32 (2004).
- Constantinides, A., Coffman, E.G., Jr., “*Content Distribution for Seamless Downloading*”. Presented at INFOCOM 2005 Student Workshop, Miami, FL, March 2005.
- Constantinides, A., Coffman, E.G., Jr., “*Optimal Seamless Self-Assembly of Files in Linear Networks*”. In Optimization Letters 1(2): 119-128 (2007).
- Constantinides, A., Coffman, E.G., Jr., “*Seamless Self-Assembly of Files in Cache Networks at Minimum Achievable Storage Cost*”. Submitted for publication.

ACTIVITIES

Vice-President, Columbia University Hellenic Association (November 2001 – November 2005)
Executive Board Member, Cypriot Students Association of America (March 2005 – March 2006)
Dancer, Pancyprian Association of New York (September 2001 – June 2006)
Student Member, Institute of Electrical and Electronics Engineers
Student Member, Association for Computing Machinery