

BIOGRAPHY

Elvis C. Foster is Professor of Computer Science at Keene State College. He holds a Bachelor of Science (BS.) in Computer Science and Electronics, as well as a Doctor of Philosophy (PhD) in Computer Science (specializing in software engineering and database systems) from University of the West Indies, Mona Jamaica. His research interests include the development as well as evaluation of management support systems for contemporary organizations.

Dr. Foster has over 25 years of combined experience as a software engineer, information technology executive and consultant, computer science educator, and leader in higher education. He has had the favorable experience of spearheading and/or participating in the design and development of software systems for various medium-sized and large organizations, including the central Bank Jamaica. He has extensive experience in curriculum design, academic program evaluation, self-study writing, scholarly research and writing, and institutional strategic planning. He has lectured at the tertiary level in three different countries, including the United States, and has produced many outstanding computer science professionals. Many of them have excelled at graduate school, and are doing well in leading software engineering enterprises around the world.

Dr. Foster is the author of ten books, seven of which are textbooks in Software Engineering and Database Systems respectively; the other three books fall in the category of community outreach. Additionally, he has authored a growing online Computer Science Lecture Series, featuring complete courses in the following areas: Programming Fundamentals in Java; C++ Programming Fundamentals; Principles of Programming Languages; Operating Systems Design; Software Engineering; Database Systems; etc. He has also authored several articles in selected scholarly journals, and has served as peer reviewer and/or editor in other selected scholarly publications.

EDUCATION

- Completion of seven doctoral courses in Organizational Behavior & Management, 2012-2014, Capella University, Minneapolis, Minnesota
- Doctor of Philosophy (PhD) in Computer Science, 1996 – 1999, University of the West Indies, Mona, Jamaica.
[Emphasis: Software Engineering and Database Systems]
- Master of Philosophy (MPhil) in Computer Science, 1994 – 1996, University of the West Indies, Mona, Jamaica
- Completion of 27 credits in Master of Science (M.Sc.) in Management Information Systems, 1993 – 1994, University of the West Indies
- Diploma in Management Studies (project outstanding), 1993, Jamaica Institute of Management (Affiliate of Nova University, Florida)
- Bachelor of Science (B.Sc. honors) in Computer Science and Electronics, 1983 – 1987, University of the West Indies, Mona
- Professional training in Oracle Certified Professional Database Administrator (OCPDBA), 2003
- Professional training in Microsoft Certified Systems Engineer (MCSE), 2003

PROFESSIONAL ASSETS**Extensive Experience (over 20 years) in the following:**

- Software Engineering; Database Systems; Information Engineering
- Project Planning and Management; Human Resource Management
- Budget Planning and Management; Strategic Corporate Planning
- Lecturing and Human Resource Training at Tertiary and Professional levels
- Curriculum Design; Academic Program Review & Evaluation
- Self-study Writing; Scholarly Research and Writing

Specialization in:

- Software Engineering
- Database Systems

Keen Interest in:

- Management Support Systems
- Leadership in Higher Education

COMPUTER SCIENCE COURSES TAUGHT CONSISTENTLY OVER THE PAST 20 YEARS

Introduction to Computer Science
Computer Programming with C++ **
Computer Programming with Java **
Data Structures & Algorithms **
Computer Organization & Architecture
User Interface Design & Visual Programming
Software Engineering **
Database Systems **
Operating Systems **
Data Warehousing **

** Taught frequently over the past 12 years, or recently

Computer Science Research
Special Projects in Computer Science
Software Engineering Project **
Object Oriented Methodologies **
Oracle Certified Professional Database Administrator
Strategic Information Management
Principles of Programming Languages **
Operating Systems Design **
Electronic Communication Systems

** Taught frequently over the past 12 years, or recently

SCHOLARLY PUBLICATIONS, ACTIVITIES, AND RESEARCH INTERESTS**Traditional Publications and/or Activities — Books (italicized) and Papers:**

- *Database Systems: A Pragmatic Approach*, 3rd Ed. CRC Press, NY, 2022 (June)
- *Software Engineering: A Methodical Approach*, 2nd Ed. CRC Press, NY, 2021
- *Special Topics in Economics and Management*. Athens Institute of Education and Research (ATINER), 2017. https://www.atiner.gr/docs/ALL_PUBLICATIONS.htm
- *Database Systems: A Pragmatic Approach*, 2nd Ed. Apress Publishing, NY, 2016
- Three Innovative Software Engineering Methodologies. Presented at the 2nd Global Online Conference on Information & Computer Technology, Sullivan University; November 4 – 6, 2015
- Towards Measuring the Impact of Management Support Systems on Contemporary Management. Presented at the ATINER 11th Annual International Conference on Information Technology & Computer Science; May 18-21, 2015, Athens, Greece
- *Software Engineering: A Methodical Approach*, Revised Ed. Apress Publishing, NY, 2014
- *Database Systems: A Pragmatic Approach*, Revised Ed. Apress Publishing, NY, 2014
- Peer review for the journal *Taylor & Forbes Assessment and Evaluation in Higher Education*, 2014
- Dynamic Menu Interface Designer (DMID). Presented at the ATINER Conference for Computer Science in Athens, June 2011. Published in Papadopoulos & Petratos; *Enterprise Management Information Systems*; University of Hull, California State University Stanislaus, 2012
- *Software Engineering: A Methodical Approach*. Bloomington, IN: Xlibris, 2010
- *Database Systems: A Pragmatic Approach*. Bloomington, IN: Xlibris, 2010
- *Labor Market Information System: Thesis*. Mona, Jamaica: University of the West Indies, 1999
- *Labor Market Information System Requirements Specification*. Mona, Jamaica: University of the West Indies, 1998
- *Labor Market Information System Design Specification*. Mona, Jamaica: University of the West Indies, 1998
- Towards a Labor Market Information System. Published in *Institute for Social and Economic Research Journal*, 1997, Vol. 46, No. 4
- *Labor Market Information System: Why, How, When and Where*. Mona, Jamaica: University of the West Indies, 1996
- *Labor Market Information System: A Brief Account*. Mona, Jamaica: University of the West Indies, 1996

Other Soft Publications via my Website:

- *C++ Programming Foundations*. 2017. <http://www.elcfos.com/lecture-series>
- *Lecture Notes in Operating Systems Design*. 2017. <http://www.elcfos.com/lecture-series>
- *Lecture Notes in Programming Foundations*. 2015. <http://www.elcfos.com/lecture-series>
- *Lecture Notes in Principles of Programming Languages*. 2014. <http://www.elcfos.com/lecture-series>
- *Forecasting Leadership in Higher Education*. 2016. <http://www.elcfos.com/papers-in-obm>
- *Comparative Analysis of C++, Java, and Python Languages*. 2014. <http://www.elcfos.com/papers-in-cs>
- *Design Specification: Dynamic Menu Interface Designer*. 2011. <http://www.elcfos.com/papers-in-cs>
- *On-demand Publishing and Scholarship*. 2010. <http://www.elcfos.com/papers-in-cs>
- *A Generic Performance Evaluation Model for Institutions of Higher Learning*. 2010. <http://www.elcfos.com/papers-in-obm>
- *Ethical Issues in Institutions of Higher Learning*. 2010. <http://www.elcfos.com/papers-in-obm>
- *A Case for Regulation of Monopolies and Oligopolies*. 2010. <http://www.elcfos.com/papers-in-obm>

Internal Publication of a CS Lecture Series (at USC, AUC, and KSC):

- *Lecture Notes in Software Engineering* (1996 – 2008)
- *Lecture Notes in Database Systems* (1997 – 2008)
- *Lecture Notes in Operating Systems* (1997 – 2012)
- *Lecture Notes in Computer Programming with C++* (2001 – 2015)
- *Lecture Notes in Computer Programming with Java* (2001 – 2009)
- *Lecture Notes in Data Structures & Algorithms* (1997 – 2016)
- *Lecture Notes in Strategic Information Management* (2000 – 2005)

Community Outreach Publications:

- *Life — Essence of it All*. New York: Page Publishing, 2021.
- *Path-Light: A Journey through Scriptures*. Bloomington, IN: Xlibris, 2010
- *Power: A Collection of Bible-based Musical Programs*. Bloomington, IN: Xlibris, 2010

Current Research Interests Include the Following Projects:

- Innovative Software Engineering Methodologies
- Organization and Management with focus on Management Support Systems (MSSs)

SUMMARY OF PROFESSIONAL ACHIEVEMENTS

- Design, development, & implementation of medium-sized as well as large, complex software systems (in various organizations and independently as a researcher)
- Founding of a Software Engineering Center in three institutions (USC, AUC, and KSC)
- Revision and development of CS curricula in four institutions (NCU, USC, AUC, and KSC)
- Initiation of software engineering internship programs in two institutions (USC and AUC)
- Publication of six textbooks, three outreach books, and several scholarly articles
- Track record of excellence and success as a software engineer, IT consultant, manager, administrator, educator, and mentor

SELECTED PROFESSIONAL ACHIEVEMENTS AND AFFILIATIONS RELATED TO CURRENT JOB

Significant Contributions at Keene State College	
Contribution	Timeframe
Complete revision of the Computer Mathematics (CM) program, the Applied Computer Science (ACS) making each program more competitive and relevant	2006 – 2009
Development of resource libraries for various courses in the ACS, CM, and CS programs: CS140 Programming I, ISCS140 Programming foundations I, CS185 Programming Foundations II, CS225 C++ Programming, CS280 Data structures & Algorithms, CS320 Operating System Design, CS360 Database Systems, CS375 Software Engineering, CS430 Principles of Programming Languages; CS440 Software Engineering Project	2005 – present
Served on the Integrated Studies Program Committee (ISPC) making the following contributions: refinement and approval of the current Integrated Studies Program (ISP); made a presentation to the ISPC on the importance of Computer Science in an integrated studies program; served on a subcommittee to refine and broaden the integrated outcomes for the ISP	Aug 2006 – Dec 2007
Served on the Science Curriculum Committee (SCC), participating in all the activities that led to the approval of various curriculum changes initiated by various departments	2006 – 2010
Served on the Integrative Studies Program Review Task Force (ISPRTF), providing sub-committee leadership in the following areas: development of the questionnaire for the Faculty Survey that was conducted; analysis of survey findings and preparation of reports relating to Structure and Governance of the ISP	2010 – 2012
Revision of the CS curriculum: unifying the Applied Computer Science (ACS) program and the Computer Mathematics (CM) program into a more competitive Computer Science (CS) program with six specialization tracks suited for the varied interests and talents of students; revision of several courses in order to add more relevance and competitive advantage; introduction of two new courses and deletion of five redundant courses	2011 – 2013
Revision of CS student advising to promote higher level of student success: Development of an Advising/Mentoring Plan; new Degree Completion Plan; new Degree Progress Tracking instrument	2013 – present
Development and implementation of a CS Marketing Plan: revised CS information on college website; development and management of new CS website with state-of-the-art features including content management	2013 – present
Student Enrollment: Increased enrollment by over 100% (from 53 to 120); significant increase in student morale	2013 – present
Program Assessment: Overhaul of the CS program assessment plan and benchmarks, including program-outcomes matrix and course-outcomes matrices	2013 – 2014
Strategic Plan: Development of a six-year strategic plan (2013 – 2019) for the CS Department, covering themes such as CS Curriculum; Student Success; Faculty Development; Marketing & Communications; Strategic Collaborations; and Undergraduate Research	2013 – 2014
Industry Collaborations: Increased collaboration with key industry leaders in the college community, leading to increased partnerships and internship opportunities	2013 – present
Network Infrastructure: Reinforcement of the network infrastructure that supports the CS curriculum (including acquisition, installation, and configuration of new server)	2014 – present
Self-study: Writing of CS Self-Study for program evaluation and accreditation	2013 – 2014
Encouragement and sponsorship of a CS Club administered by CS majors	2013 – present
Initiation of a CS Peer Mentoring Initiative (CS-PMI) among CS majors	2013 – present
Successful negotiation for, and hiring of two new CS faculty members	2013 – 2016
Launching of a CS Lecture Series	2014 – present
Founding of a Software Engineering Research Initiative (SERI) & Lab	2015 – present
Professional Affiliations	
I am a member of the Association for Computing Machinery (ACM), with subscription to four of its interest groups. I am also a member of the Institute of Electrical & Electronic Engineering (IEEE), with subscription to five of its interest groups.	2000 – present

EMPLOYMENT HISTORY

From	To	Job Title	City and Country	Organization or Institution
06-2017	Present	Professor of Computer Science	Keene, NH, USA	Keene State College (KSC)
06-2005	06-2017	Associate Professor of Computer Science (also Chair)	Keene, NH, USA	Keene State College (KSC)
02-2000	05-2005	Associate Professor & Chair of Department of Computer Science & Mathematics	South Lancaster, MA, USA	Atlantic Union College (AUC)
09-1996	08-1999	Assistant Professor & Chair of Computer Science	Maracas, Trinidad	University of Southern Caribbean (USC)
12-1994	08-1996	Lecturer and IT Consultant	Mandeville, Jamaica	Northern Caribbean University (NCU)
06-1992	06-1994	Senior Systems Analyst; Acting Director of Information Technology	Kingston, Jamaica	Human Employment and Resource Training — National Training Agency (HEART-NTA)
11-1989	05-1992	Systems Analyst	Kingston, Jamaica	Gleaner Company of Jamaica (GCJ)
08-1987	11-1989	Programmer/Analyst	Kingston, Jamaica	Bank of Jamaica (BOJ)

REFERENCES

I have a cadre of references including people I have worked with, and former students who are now doing quite well in their respective organizations. A list of references can be made available upon request.