

## INTERDISCIPLINARY Ph.D. PROGRAM

University of Missouri-Kansas City  
School of Graduate Studies

Discipline-Specific Information: **Computer Science**

Doctoral research in Computer Science of both fundamental and applied nature covers a broad spectrum from algorithms, bioinformatics, databases, security, to software engineering.

### Discipline-specific admissions requirements

PhD applicants should have a GPA of 3.5 or above and GRE quantitative percentile in the mid-80's or higher. We expect that applicants have an MS in Computer Science or Electrical Engineering but in exceptional cases, we carefully consider applicants with just baccalaureate in Computer Science or Electrical Engineering, or graduate degrees in related fields. It is expected that the applicants already have at least upper division undergraduate level courses in data structures and operating systems. All applications are carefully and diligently evaluated. In this evaluation, we examine and consider applicant's academic performance, research experience (if any), a personal narrative, and recommendation letters. Our admission decision is based on this evaluation, and the willingness of a faculty to be the interim advisor.

The TOEFL, with a score of 213 or above (550 in the old system), is required for international applicants whose native language is not English.

### Suggested compatible co-disciplines

Telecommunications & Computer Networking, Electrical & Computer Engineering, Mathematics, Engineering, Physics, Entrepreneurship and Innovation, Oral Biology, Molecular Biology & Bio-Chemistry, Geosciences, Economics, or Chemistry.

### Application review and timetable

Application packets for doctoral study in Computer Science can be requested from the Graduate Programs Office (<http://www.umkc.edu/sgs>) or International Student Affairs Office (<http://www.umkc.edu/isao>). These documents are also available on the web and we encourage prospective applicants to use the on-line application process available at <http://www.umkc.edu/admissions/>. The deadline for applicants requesting financial support should be received before February 1 for Fall applicants. All applications require complete transcripts, GRE scores (and TOEFL for international applicants), a personal narrative (why wanting to pursue PhD), and at least three letters of recommendation.

### Support available

Only a selected number of newly admitted students receives teaching or research assistantship awards prior to their arrival on campus. However, currently, *all* full-time doctoral students (in good academic standing) receive financial support as graduate teaching or research assistants. Students are also eligible to compete for a wide range of additional campus-wide full fellowships and complementing support awards.

### Doctoral faculty with current research interests

We have excellent faculty who are active in fundamental and applied research, and teaching. Their research activities are supported by NSF and industry.

**Deendayal Dinakarbandian**, M.D., Assistant Professor (Ph.D., Case Western Reserve University), Bioinformatics, Biological data mining, Intelligent software agents in biology, Modeling biological systems

**Yijie Han**, Associate Professor (Ph.D., Duke University), Parallel Computation, Algorithms, Computational Geometry

**Lein Harn**, Professor (Ph.D., University of Minnesota), Cryptosystem Design, Computer Security, Network Security

**Vijay Kumar**, Professor (Ph.D., Southampton University, UK), Main memory databases, Mobile Computing, Mobile database security, sensor and web technology, bioinformatics

**Yugyung Lee**, Associate Professor (Ph.D., New Jersey Institute of Technology), Semantic web, Data mining, intelligent agents, medical informatics

**EK Park**, Professor (Ph.D., Northwestern University), Software engineering, object-oriented design, formal methods, optical networking

**Xiaojun Shen**, Professor (Ph.D., University of Illinois at Urbana-Champaign), Distributed algorithms, parallel processing, interconnection networks

**Appie van de Liefvoort**, Professor (Ph.D., University of Nebraska-Lincoln), Queueing theory, algorithms, network performance modeling

The following faculty members have secondary affiliations in this discipline: Baek-Young Choi (Network Monitoring; sensor networks; data mining), Reza Derakhshani (computational intelligence, biometrics, bio-medical Fall'07

imaging), Deep Medhi (computer networking), Ken Mitchell (network traffic modeling), Jerry Place (network performance modeling, simulation), Yu-Ping Wang (bio-medical imaging, genomic signal processing, bioinformatics).

**For more information or to schedule a campus visit with faculty in this discipline, contact:**

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