**Ge Gao**

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United States

**OBJECTIVE**

To apply for a full-time position as Software Engineer in Test.

Area of expertise: Software Engineering, Data Mining.

**EDUCATION**

**University of Virginia,** Charlottesville, VA Currently Enrolled

­Ph.D. program in Computer Science - GPA 3.9/4.0. Advisor: Dr. Kevin Sullivan

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­**Zhejiang University,** Hangzhou, China Sep. 2006 ~ Jun. 2008

­M.S. program in Computer Science

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­**Zhejiang University**, Hangzhou, China Sep. 2002 ~ Jun. 2006

­B.S. program in Computer Science - GPA 90/100

**PROJECT EXPERIENCE**

* **Software Engineering**

Oct.10-Present**Social Decision Networks in Software Engineering**

*Software Engineering Group, University of Virginia, Charlottesville, VA*

* Proposed and developed a model of Social Decision Networks(SDNs) which formalizes how people in social networks perform collaborative decision making in software development.
* Developed a Web 2.0 based tool to support distributed social construction SDNs and infer the coordination requirements in the social networks for software quality improvement.
* Part of IBM Open Collaborative Research program
* Technology used: RESTful web service, Javascript+Ajax(Dojo), Comet, Non-SQL database

May.10-Aug.10 **Supporting Enterprise Stakeholders’ Collaboration using Decision Space**

*Internship at IBM T.J. Watson Research Center, Hawthorne, NY*

* ­Designed and prototyped a framework that provides supports for enterprise stakeholders’ collaboration in software development process in the ontology of decision space.
* Technology used: Restlet, Javascript+Ajax(Dojo), J2EE

May.09-May.10 **Grounding the Concept of Socio-Technical Congruence in a Decision-Based Ontology**

*Software Engineering Group, University of Virginia, Charlottesville, VA*

* Developed and recast theories of Socio-Technical Congruence of software ecosystems in terms of design decisions and dependencies.
* Based on the STC theories, developed collaboration analytics on top of IBM Rationale Jazz platform.
* Technology used: IBM Rational Jazz development platform, Eclipse Plug-in Development, Eclipse Modeling Framework
* **Wireless Sensor Network**

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­Dec.08-May.09 **Wireless Sensors based Load Monitoring and Energy Conservation**

*­Wireless Sensor Network Group, University of Virginia, Charlottesville, VA*

* ­Proposed a wireless sensors based framework which monitors and reduces residential energy expenditure by monitoring and predicting occupancy patterns.
* Technology used: Matlab, data mining

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* **Data Mining**

­Sep.06-Jun.08 **Motion Time Series Classification**

*­Database Lab, Zhejiang University, China*

* ­Proposed a Classification Model for Multivariate Motion time series, with application of machine learning methodologies to feature extraction, dimension subset ranking & selection and model training; conducted experiments to demonstrate model performance and compare with conventional techniques.
* Technology used: Decision Tree, Neural Networks, Numerical Analysis

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* **­Select Course Projects**

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* ­*Software Engineering.* Developed an Android application that allows mobile phone users to participate in Weichi contest on KGS Go server and is able to provide move recommendation intelligently.
* *Computer Architecture*. Simulated Simultaneous Multithreading Processor using SimpleScalar.
* *Operating System*. Designed an algorithm to optimize Linux scheduling to reduce cache coldness on multi-core systems.
* *Compilers.* Designed and developed a BDC compiler with using Lex and Yacc.­

**PUBLICATIONS**

**Ge Gao,** Kevin Sullivan. “Social Decision Networks in Software Engineering”. 34th International Conference on Software Engineering. Zurich, Switzerland. (under review)

**Ge Gao**, Kamin Whitehouse. "The Self-Programming Thermostat: Optimizing Setback Schedules based on Home Occupancy Patterns". First ACM Workshop On Embedded Sensing Systems For Energy-Efficiency In Buildings (BuildSys '09), held in conjunction with ACM SenSys. Berkeley, CA, Nov. 2009.

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­Lidan Shou, **Ge Gao**, Gang Chen, Jinxiang Dong. "Classifying Motion Time Series Using Neural Networks". 7th IEEE Pacific Rim Conference on Multimedia (PCM 2006)

**PROFESSIONAL SKILLS**

C/C++(6+years), Java(5+years), HTML, CSS, Javascript; experienced in RESTful web service, Ajax toolkit, J2EE, Android application development, Eclipse plug-in development, UML and Matlab; programming on Unix/Linux; familiar with data mining and machine learning techniques.

**TEACHING EXPERENCE**

TA, University of Virginia

* Discrete Mathematics. Course discussion, student communication, evaluation. *Autumn 2008*
* Theory of Computation. Project design, student communication, evaluation. *Spring 2009*