

Yifeng “Brian” Zhou

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QUALIFICATIONS SUMMARY

Advanced process control engineer with a PhD degree in chemical engineering and a unique blend of process control, process knowledge, and programming proficiency. Three years of research experience in process monitoring and control during study. Offer excellent communication skills, creative problem solving, and effective people/project management.

- In-depth experience applying advanced mathematical principles to **PROCESS CONTROL** and **SYSTEM ANALYSIS** to produce innovative solutions
- Demonstrated strong **SOFTWARE AND PROGRAMMING** ability with various languages and scientific software packages; certified programmer in China
- Hands-on experience in popular distributed control systems and Foundation Fieldbus
- **PROJECT AND PEOPLE MANAGEMENT SKILLS**: proven ability to oversee complex projects and effectively form and manage teams to high levels of performance

TECHNICAL COMPETENCIES

- **Process Control and System Analysis**: Neural Networks, Multivariate Statistical Analysis, Digital Signal Processing, Classification Trees, Process Modeling and Simulation, Process Control, Model Predictive Control, Foundation Fieldbus, Emerson DeltaV, Honeywell TDC 3000
- **Software and Programming**: Visual Basic/VBA, C, Java, Fortran, Pascal, Matlab, Maple, SPSS, MS Office, MS Visio, HTML, MS Windows (98/NT/ME/2000/XP), Unix/Linux

EDUCATION

Texas A & M University, College Station, TX

PhD in Chemical Engineering May 2004 (Expected) GPA 3.8/4.0

National Honor Society of Phi Kappa Phi

Research Institute of Petroleum Processing, China

MS in Chemical Engineering March 1999 GPA 92/100 Top 5% of class

Xian Jiao-Tong University, China

BS in Chemical Engineering with Honors June 1996 GPA 89/100 Top 3% of class

PROFESSIONAL EXPERIENCE

September 2003 – present
Applied Materials, Inc., Austin, Texas (NASDAQ: AMAT)

Intern

- Perform occupational, chemical, and environmental safety analysis
- Update safety documents including policies, procedures, work instructions
- Develop safety training courses

August 1999 – present
Mary Kay O'Connor Process Safety Center, Texas A & M University
The largest institute for process safety education & research in USA

Research Assistant, January 2000 – present

- Seek innovative solutions for process monitoring, fault detection and diagnosis from the perspective of pattern recognition

- Techniques used: neural networks, multivariate statistical analysis (PCA, PLS, FDA, etc), classification trees, nonlinear state observer, system identification, feature extraction, and discrete time simulation
- Created a discrete time simulation of a process with eight chemical components, four reactions, and 50+ process variables
- Designed and built a continuous liquid phase reactor for validating algorithm
- Developed an automatic data logging program for Emerson DeltaV DCS

March 1999 – July 1999
 eNet Internet Technologies Co., Ltd., Beijing, China
An Internet content provider startup with 60 employees

Director, April 1999 – July 1999

- Led the successful launch of IT news channel eNews.com.cn and supervised six content editors

September 1996 – March 1999
 Research Institute of Petroleum Processing, Beijing, China
R&D Center of China Petroleum & Chemical Corporation (NYSE: SNP)

Research Assistant, September 1996 – March 1999

- Independently designed and conducted hydrodesulfurization experiments on 23 gas oils
- Developed innovative kinetic models for gas oil deep hydrodesulfurization using neural networks and multivariate nonlinear regression
- Operated and maintained a petroleum hydrotreating pilot plant of 20 units with Honeywell TDC 3000 DCS during June – September 1997

October 1997 – July 1998
 Zhongke-Xianglong Computer Co., Beijing, China
Information technology consulting

Project Manager (Part-time)

- Formed and directed a team of five authors
- Led the overall planning, established formatting protocol, and authored 50% of the chapters of a book on programming with Visual Basic

PUBLICATIONS

- One book on Visual Basic programming
- Two journal papers published and two journal papers under review
- Five conference papers and presentations

AFFILIATIONS AND EXTRACURRICULAR

- ISA IEEE Phi Kappa Phi
- VP for Finance, TAMU International Graduate Student Association
- VP for Social, TAMU China Club
- Volunteered for ISA Expo 2001 and Aggie InfoTech 2000