

VLSI & GRAPH THEORY

1. CONTACTS

markchen@xmail.net

<https://neolifemark.blogspot.com/>

2. EDUCATION

PhD & Higher Degrees

Admitted into University of Glasgow (PhD for gas turbine combustion research, 1991) and several others (University of Paris VII, Université Laval, Université de Provence, Universität Gesamthochschule Essen, Zhejiang University)

Master and Bachelor degrees from a Chinese university in Shanghai (name omitted) for thermophysics and thermal engineering resp.

3. LANGUAGES

Previously multilingual.

English – near native already in the early 90's

German – quite fluent

French – fair, reading ability

Russian – fair, some reading

etc

4. IT & INTERNET

Familiar with most IT technologies.

5. CAREER & BUSINESS

2009 –NeoWorld

- Online finance consulting, focusing on security, see
 - English:
 - ◆ <https://neoworldbusinessco.wordpress.com/>
 - ◆ <https://neoworldbusinesscorp.blogspot.com/>
 - ◆ <https://sites.google.com/site/neoworldfinance/>
 - ◆ <https://groups.google.com/d/forum/neoworldfinance>
 - ◆ <https://plus.google.com/collection/sPlwUE>
 - ◆ <https://www.facebook.com/markchen1962>
 - ◆ <https://www.facebook.com/NeoWorld-741472769396407/>
 - ◆ <https://www.facebook.com/groups/237740023425164/>

- ◆ and some more sites.
- Chinese
 - ◆ <https://neoworldbusinesscorp.wordpress.com/>
 - ◆ <http://blog.sina.com.cn/solaires>
 - ◆ <https://weibo.com/helioslab>
 - ◆ <http://1296745250.qzone.qq.com>
 - ◆ <https://www.baidu.com/p/新世界网络金融>
 - ◆ <https://www.zhihu.com/people/markchen1962>
- Super IC Technologies <https://superictech.wordpress.com/>
- Power generation equipment trading and consulting and other commodities (stopped)
- Operations research + combinatorial optimization + graph theory (stopped)
- Marketing consulting (stopped)

2000-2009 Solaires etc

- Consulting, reporting, marketing and sourcing services for international power & solar communities incl. with my flagship **ChinaSolar** reporting.
- IT services to local companies in Shanghai, incl. those foreign invested. My services included website development, globalization and localization, database design and management, as well as online business and online communications system configurations.
- Language translation services (mainly German and English in both directions to and from Chinese) for foreign clients stationed in China or overseas. Services also included website localization and globalization, databases and software translation, localization and globalization
- Miscellaneous
 - Thermal technologies
 - Fluid technologies
 - Nano science and technologies
 - Business aviation, yachts and other luxury markets
 - Properties (real estates)

1997.11 – 1999.11 Deutsche Babcock China (Beijing, China), Utilities Boiler Purchasing Manager

Procurement manager and engineer for 600MW class utility boiler materials and parts with a 1996 value of **USD 160 millions**.

1996.5 – 1997.10 ALSTOM East China (Shanghai, China) , Electrical Engineer focusing on Marketing

Managing a market of over **13 billion US Dollars (1997 value)** of the power and, industrial divisions in east China.

1994.11 – 1996.4 TÜV Rheinland (Shanghai, China), ISO 9000 Quality Certification Project Engineer

Quality Assurance Certification for exporters and major manufactures in China, incl those popular names such as Volkswagen Shanghai, AMECO, Schindler, Schenck, and Siemens Automation.

1992.6 – 1994.6 Siemens Heimann Optoelectronics (Shenzhen, China), Electronic Quality Dept Manager

Manager of the Quality Department of the then Siemens subsidiary in Shenzhen, Guangdong province..

Earlier jobs omitted.

6. RESEARCHES & AUTHORIZING

During the last years since 2003 I have written hundreds or even thousands of academic, business and commentary notes in the forms of papers, presentation slides, reports, booklets and books in the areas such as solar physics, thermodynamics, fluid dynamics, IT (incl cryptography), VLSI chip design and mathematics, incl math for VLSI design:

- VLSI Chip technologies
 - Next generation chip / VLSI technologies, incl
 - **Quantum circuit – current primary focus**
 - Graphene based FET
 - Spintronic circuit
 - Superconducting circuits
 - Many, many others
- Mathematics (2010 to today)
 - **graph theory – graph data structure and graph embedding– current secondary focus**
 - Number theory related to cryptology
 - Differential and integral equations
 - functional analysis and
 - numerical computation
- Fluidynamics (2010)
 - Micro/Nano Flows
 - CFD - computational fluid dynamics
- Thermal Physics & Thermodynamics (2008-2009)
 - Nanothermodynamics,
 - Mesoscopic Thermodynamics (Thermodynamics Of Small Structures),
 - Cosmic Thermodynamics Or Thermodynamics Of The Universe,
 - Thermodynamics Of Cancers,
 - Thermodynamics & Thermophysics Of Life, and Biology
 - Solar Thermodynamics & Thermophysics,
 - Thermodynamics And Thermophysics In Solar Radiation And Measurement,
 - Thermodynamics Of Solar Energy Systems, Solar Technology, Industry And Applications
- Solar related (2007-2008)
 - Solar physics,
 - Solar radiation and its measurement technologies,
 - solar aviation and aerospace,
 - solar photovoltaics

All dates are approximate