
Patrick Khoo

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OBJECTIVE

To excel in a career that focuses on value creation, especially in a technology field.

ABILITIES

- Experienced in setting up and managing project teams or entire technical departments, including management of source code, intellectual property, budgets, procurement and recruitment.
 - Skilled in developing and managing business opportunities from technology especially in the areas of product feature management, planning, delivery and deployment.
 - Able to translate between technical and business objectives, concepts and strategies in a way that is easy for both technical and non-technical users at all levels to understand.
 - Technical skill-set covers fields such as cloud based applications and services, storage, networking, operating systems, IT technical services and logistics.
 - Hands-on programming experience includes HTML/CSS, Javascript, PHP, C++, Windows and Linux daemons / services and Linux Kernel and Windows device drivers.
 - Able to work individually and as part of a team.
 - Motivated, hardworking, helpful, goal-oriented and a fast and enthusiastic learner.
 - Excellent communication and public speaking skills.
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EDUCATION

Completed a Bachelor of Science Cum Laude (with honours - 3.56 CGPA) degree in Computer Science with a double minor in Computer Information Systems and Mathematics.
Certified Novell Engineer and Certified Novell Administrator for IntranetWare.

WORK EXPERIENCE

April 2018 to
October 2018

CHIEF ARCHITECT

Plus65 Interactive Pte. Ltd.

Managed a 40-person development team organised into back-end, front-end, blockchain, UI/UX, devops and QA departments in an agency environment with over 10 ongoing agile and waterfall structured fast changing client-driven projects. Developed mentorship and training programs using both in-house and external strategies for new and existing staff. Designed and implemented a new KPI performance appraisal system to balance requirements for technical excellence, career advancement and project management. Designed and implemented a new tracking and management of recruitment processes together with HR. Set company-wide technical standards and best practices as well as managed collaboration between technical teams and project management with tight deadlines and multiple competing concerns.

June 2016 to
March 2018

BUSINESS AND TECHNOLOGY STRATEGIST

Bizibody Technology Pte. Ltd.

Focused on the intersection between state-of-the-art technology with the traditional and noble legal industry, especially in the areas of business development, workflow efficiency and future-proofing. Clients include small one man companies, mid-sized firms with over ten branches, mainboard listed conglomerates and government statutory boards. Project areas include document assembly and management, workflow automation, project and matter management systems, and AI driven analysis. Led and performed various software development, client-facing solution consulting and end-user training for Bizibody internally developed as well as Canadian, Australian and locally developed products.

April 2009 to
April 2019

CO-FOUNDER AND DIRECTOR

Opto Technica Pte. Ltd.

Co-founded and managed a new technology services start-up, focusing on after-sales services and support for technology products, primarily in the data storage industry. Pitched to and landed a major MNC client and tripling monthly gross revenue after six years. Established service capabilities for after-sales email and phone support, reverse logistics and unit repair and refurbishment, warehousing and forward logistics management.

July 2015 to March 2016	CHIEF TECHNOLOGY OFFICER <i>Interstellar Group Pte. Ltd.</i> Established and recruited an in-house software development team for technology development of websites and a SaaS platform. Implemented version controls with continuous integration with four in-house developers and three external contractors for eight production websites and two servers. Applications and technologies developed included payment gateways, single-sign-on and API access facilities for third-party integration and centralised database with security controls and backups. Also performed management corporate strategic planning with regards to company-wide KPIs and fund-raising strategies.
January 2004 to Present	CO-FOUNDER AND MANAGING DIRECTOR <i>Digital Artifact Pte. Ltd.</i> Co-founded and managed a new technology start-up, focusing on data backup and recovery. In 2004, the company released its first product, the DataSaver appliance, a ground-breaking network-based appliance that performs backup and recovery for computers and servers in an extremely simple and straightforward manner. It includes advanced technologies such as Continuous Data Protection, Bare Metal Restore and automated Intelligent Disk Space Management but tightly integrated to form a simple, one-stop solution for companies. The DataSaver's users include government agencies, large multi-nationals and small businesses throughout the Asia-Pacific region.

VOLUNTARY AND NON-PROFIT EXPERIENCE

February 2008 to March 2016	PRESIDENT (Elected) <i>Mensa (Singapore)</i> Led and managed a national non-profit volunteer-driven society catering to a niche membership based on qualification in a standardised test. Membership numbers for Singapore reached a historical high, going from 550 at the end of 2008 to 1200 at the beginning of 2016. Major achievements included organising Asia-wide events such as the 2013 Asian Mensa Gathering (hosted for the first time in Singapore), the first ever Singapore-Malaysia-Philippines Mensa Flash Fiction Writing Competition in 2015 and helping to establish annual community service events in support of the Northlight School from 2008 onwards.
April 1998 to November 2004	EDITOR-IN-CHIEF (Appointed) <i>Mensa (Singapore)</i> Managed, edited, designed, laid-out, wrote and produced a monthly printed magazine for the society. Worked with a team of volunteer writers together with a commercial printer for printing and distribution efforts for total print run averaging 700 to 800 issues per month to local and international members. Design and layout performed using Adobe InDesign.
April 2001 to March 2003	PRESIDENT (Elected) <i>NetWare Users International (Singapore)</i> Led and managed a national non-profit volunteer-driven technical user group. Worked with both the primary technology provider, Novell Inc, and with other branches globally.

PUBLISHED PAPERS AND PRESENTATIONS

22-23 September 2003	DATA STORAGE SUPPORT FOR GRID COMPUTING <i>Agency for Science, Technology And Research (A*STAR) Computing Grid Thematic Strategic Research Program Workshop</i>
7 December 2002	SIR, THIS IS YOUR MICROWAVE OVEN CALLING . . . <i>Singapore Science Center Inaugural "Meet the Scientist" Monthly Talk</i>
15-18 April 2002	INTRODUCING A FLEXIBLE DATA TRANSPORT PROTOCOL FOR NETWORK STORAGE APPLICATIONS – PATRICK KHOO, WILSON WANG <i>10th NASA Mass Storage Systems and Technologies Conference / 19th IEEE Symposium on Mass Storage Systems, University of Maryland</i>

WORKING EXPERIENCE AND RELATED PROJECTS

Chief Architect – April 2018 to October 2018

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Managed a 40-person development team organised into back-end, front-end, blockchain, UI/UX, devops and QA departments in an agency environment with over 10 ongoing agile and waterfall structured fast changing client-driven projects. Developed mentorship and training programs using both in-house and external strategies for new and existing staff. Designed and implemented a new KPI performance appraisal system to balance requirements for technical excellence, career advancement and project management. Designed and implemented a new tracking and management of recruitment processes together with HR. Set company-wide technical standards and best practices as well as managed collaboration between technical teams and project management with tight deadlines and multiple competing concerns.

Business and Technology Strategist – June 2016 to March 2018

Bizibody Technology Pte. Ltd.

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Chief Technology Officer – July 2015 to March 2016

Interstellar Group Pte. Ltd.

Established and hired an in-house software development team for technology development of websites and a SaaS platform. Implemented version controls with continuous integration with four in-house developers and three external contractors for eight production websites and two servers. Applications and technologies developed included payment gateways, single-sign-on and API access facilities for third-party integration and centralised database with security controls and backups. Also performed management corporate strategic planning with regards to company-wide KPIs and fund-raising strategies.

Co-Founder and Director – April 2009 to April 2019

Opto Technica Pte. Ltd.

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Co-Founder and Managing Director – January 2004 to Present

Digital Artifact Pte. Ltd.

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Program Manager and Senior Research Engineer, MCSA Group – July 2000 to December 2003

Data Storage Institute, Singapore

Tasked by the Institute Director to set up a new R&D department to pioneer efforts to develop world-class competencies in networked storage technologies, never before explored in Singapore. Created and led a team of eighteen research engineers and responsible for all aspects of budgeting, purchasing, training, human resources, project management and technical direction for the group. Worked with major MNCs, foreign laboratories and government bodies such as IBM, Sony, Hitachi Data Systems, Lawrence Berkeley National Laboratories, University of Tokyo, the Singapore Economic Development Board and the Infocomm Development Authority of Singapore.

Major R&D achievements:

- Successful invention, development and worldwide release of HyperSCSI, a new high-speed secure network storage protocol recognised by IEEE and IANA.
- Successful invention and development of XDS, a new Flexible Connected Storage architecture, with in-house developed embedded Micro-OS, capable of supporting Network-Attached Storage (NAS), Storage Area Networks (SAN) and Home Network Storage (HNS).
- Successful development and demonstration of Media Borrowing Technology for digital media over network storage.
- Development of six different technology prototypes and systems for proof-of-concept testing, benchmarking and demonstration of technologies developed.
- Initiation of new research areas such as cluster file systems for high performance computing and data grids, protocol encryption technologies, user interfaces to storage and data searching and mining software.

Other contributions and achievements at DSI:

- Represented DSI at the Open Storage Networking Local Industry Upgrading Program (OSN LIUP) Steering Committee (01-02). This is a program developed by EDB, DSI and ten other major MNCs to train local engineers in network storage. Involved in the design and development of a complete certification program, training materials and course structure to be delivered by DSI to individuals and organisations such as Singapore Computer Society and Singapore Polytechnic.
- In the NSL Development Steering Committee (01-02), tasked with planning, advising and assisting the setting up of a new R&D department called the Network Storage Lab to provide industry services, training and research and development in network storage.
- Served on DSI's People Developer Standard Steering Committee (00-02) and helped DSI to become the first research institute in Singapore to be awarded with the coveted People Developer Standard.
- Supervised more than ten students a year from polytechnics, undergraduate programs and masters/PhD research scholarship programs.
- Served on various other committees such as DSI 10th Anniversary Organising Committee (01-02), DSI Library Committee (00) and DSI Social Committee (98, 99).

Senior Network Specialist – January 2000 to June 2000

Network Specialist - August 1996 to Dec 1999

Data Storage Institute, Singapore

Led a team of four staff members in administering all aspects of a 400 station PC and 5 server multi-platform network with Novell NetWare 5, GroupWise 5.5 messaging services, Linux and Windows NT 4. Developed and maintained a World Wide Web Unix based Internet server for Web, FTP and Internet Email. Responsible for budget and personnel planning for DSI Network Computing as well as purchase recommendations and network infrastructure planning for the entire company with regard to network computing.

Major achievements:

- Developed DSI's Internet and Intranet Services including Intranet Document Libraries.
- Migrated Institute's desktop systems from Windows 3.x to Windows 95.
- Built a new Network and NDS Tree for the Institute as the corporate network.
- Deployed corporate email system, GroupWise 5.x and secondary email system on UNIX.

- Reorganised Institute's Computer inventory and purchase procedures.
- Conducted initial planning and implemented Institute's PNNI Switched ATM network in DSI Building (completed May/June 1999).
- Developed internal Asset Tracking and On-line Leave Application and Balance Enquiry databases for internal staff use and integrated MS Access 97 with NDS authentication.
- Managed and maintained computational workstations, PC cluster facilities and computer based training facilities.
- Provided Helpdesk and end-user support.

Network Administrator - May 1995 to May 1996

Office of Educational Technology, Western Michigan University

Led a team of four other staff members in administrating, maintaining and installing hardware and software on a 60 station PC and Macintosh Novell NetWare 4.1 network, made purchase recommendations, and developed, maintained and administered a World Wide Web Unix based Internet server.

Major achievements:

- Developed the Office's Internet Web site
- Migrated NetWare 3.12 server to NetWare 4.1 and centralised Windows 3.11

Computer Lab Specialist (Part time) - September 1993 to May 1995

University Computing Services, Western Michigan University

Performed hardware and software check in/out to users, computer lab maintenance, printout distribution and software and technical consultation to users.

Help Desk Consultant (Part time) - January 1995 to May 1995

University Computing Services, Western Michigan University

Provide walk-in, phone and email technical and software consultation and support as well as taught workshop class on the basics of using the Internet, Email, Confer and VMS.

Decision Support Systems Analysis and Design (Part time) - January 1995 to May 1995

*University Computing Services and Business Information Systems Department,
Western Michigan University*

Team project to develop an application for automatic workshop instructor evaluation and analysis.

Hardware/Software/Network Consultant and Specialist (Part time) - August 1994 to October 1994

Human Resources Information Systems Department, Western Michigan University

Provided hardware, software and networking consultation and troubleshooting.

Applications Programmer (Part time) - June 1994

University Computing Services, Western Michigan University

Developed Text Formatting Application to provide university class schedule information for Gopher Server.

Database Applications Programmer (Part time) - January 1994 to April 1994

Chemistry Department Stockrooms and Computer Science Department, Western Michigan University

Team project to develop an application called "Glassware and Hardware Inventory and Billing System (GHIBS)" to automate glassware and hardware inventory and management in Chemistry Department stockroom.

Stringer/Computer Lab Technician (Part time) - June 1992 to April 1993

IT Publications Sdn. Bhd. (A Subsidiary of NSTP (M) Bhd.)

Wrote computer-related articles and product reviews for a nationwide newspaper.

KEY PRESENTATIONS AND PUBLISHED PAPERS

Law Society of Singapore Technology Day – 8 July 2016
"To Cloud, or Not To Cloud"

55 @ SP, Singapore Polytechnic – 6 January 2006
"Starting a Technology Company"

Exabyte Partners Forum – 23 October 2003
"Backing Up The Real World"

Agency for Science, Technology And Research (A*STAR) Computing Grid Thematic Strategic Research Program
Workshop – 22-23 September 2003
"Data Storage Support for Grid Computing"

Business Briefing: Data Management and Storage Technology, World Markets Research Center
– September 2003
"Data Storage is the Key to Business Success"

ComputerWorld – 18 July 2003
"ComputerWorld Storage Dialogue 2003"

Data Storage Institute (DSI), Exploit Technologies (ETPL) and Singapore Infocomm Technology Federation (SITF)
Joint Workshop – 9 July 2003
"Build your own Network Storage with DSI's HyperSCSI"

Anglo-Chinese Junior College – 18 March 2003
"Introduction to Network Storage"

Marcus Evans Network Storage Technologies and Solutions Conference 2003 – 13/14 January 2003
"Ethernet Network Storage – Getting More For Less"

Singapore Science Center Inaugural "Meet the Scientist" Monthly Talk – 7 December 2002
"Sir, this is your microwave oven calling . . ."

Image and Store Symposium 2002 – 5 December 2002
"Ethernet Network Storage – Yes, You Can Have It Now"

LinuxDevices.com White Paper – 11 November 2002
"Ethernet Network Storage - Reality or Pipe Dream?" – Patrick Khoo, Wilson Wang, Yeo Heng Ng

IDG ComputerWorld Storage Forum 2002 – 30 October 2002
"Ethernet Storage Trends and Overview"

Business Briefing: Data Management and Storage Technology, World Markets Research Center – October 2002
"Ethernet and Internet Protocol-based Network Storage"

Mensa Singapore Chill and Chat Seminar – 11 May 2002
"What's a Hard Disk and How Should I Organise My Files?"

10th NASA Mass Storage Systems and Technologies Conference / 19th IEEE Symposium on Mass Storage Systems,
University of Maryland – 15-18 April 2002
"Introducing a Flexible Data Transport Protocol for Network Storage Applications" – Patrick Khoo, Wilson Wang

Innovation Magazine – April 2002

"Home Networked Storage: The Heart of your Future Home"

Storage Unlimited Magazine – April 2002

"The Heart of Your Future Home"

Storage Area Network World 2001 – 22 November 2001

"The Future of Network Storage"

National Science and Technology Board Seminar, Nanyang Technological University, 11 September 2001

"Life as a Research Engineer"

NetWorld + InterOp Conference Las Vegas - 5-7 May 2001

"XDS Technology Demonstration and Presentation"

National Science and Technology Board TechMonth - 7 September 2000

"Network Storage Technology: A Summary from the Field"

NetWare Connection - October 1998

"Can I Help You? – Exploring Your Technical Support Options"

ORGANISATIONAL INVOLVEMENT (PROFESSIONAL AND VOLUNTARY)

Voluntary Organisations:

Mensa International

<http://www.mensa.org/>

International Webmaster (2001)

Mensa Singapore Society

<http://www.mensa.org.sg/>

Honorary Secretary (2017-2019)

Membership Director (2016-2017)

President (2008-2016)

3rd Asian Mensa Gathering (Singapore) Organising Committee Chairman (2013)

Honorary Secretary (2005-2008)

Strategic Programmes Director (2004-2005)

Long-Term Planning Committee Member (1998, 2001)

Operation MindStorm Committee Member (2001)

Singapore Mensa Magazine Editor-in-Chief (1998-2004)

International Forum on Intelligence 2000 Organising Committee Chairman (1999-2000)

NUSMensa Pro-Tem Committee Member (1996-1997)

NUSMensa Branch/20Something SIG Mailing List Administrator (1996)

Malaysian Mensa Society

<http://www.malaysianmensa.org/>

National Auditor (Internal) (1992-1993)

8th National AGM, Dinner & Dance Organising Committee Member (1992)

Triple-M Magazine Contributor (1990-1992)

Penang Regional Group Committee Member (1990-1991, 1991-1992)

Role-Playing Games SIG Committee Member (1991)

3rd PRG Annual Dinner & Dance Organising Chairman (1991)

Penang Youth Branch Coordinator (1990-1991)

2nd PRG Annual Dinner & Dance Organising Committee Member (1990)

NetWare Users International (Singapore Branch)

<http://www.nui.net/>

President (2001-2003)

Webmaster (1997-1999)
PFSNet/FreesNet Alumni Organisation
Archivist (1994-1996)
Golden Key National Honor Society Lifetime Member
Kalamazoo 4H Exploring SPACES in Edison Project
Teaching Volunteer (1993)

Western Michigan University Organisations:

Western Michigan University Malaysian Student Organisation

Advisor to the Executive Committee (1995-1996)
International Graduation Night Organising Chairman (1995)
Electronic Conference Organiser (1993-1996)
Magazine Layout Editor (1993)

Western Michigan University Gamer's Guild Member

Sunway College Organisations:

Sunway College Editorial Board

Editor-in-Chief (1992-1993)
Photography Department Head (1992)

Sunway College Music, Art, Dance and Drama

Student Advisor (1992-1993)
Pro-Tem Secretary (1992)

Sunway College Computer Club

Treasurer (1992-1993)

Sunway College Debating Society Member

Penang Free School Organisations:

General Knowledge Club

Founder-Chairman (1989-1990, 1990-1991)

Inventors' Club

President (1990-1991)
Group Leader (1989-1990)

Chess Club

Official Timekeeper (1991)
Student Advisor (1991)

Computer Club Member

UNESCO Club Member

Historical Society Member

School Co-Operative Member

ACADEMIC STANDING

Higher Education: (College and University)	Sunway College, Petaling Jaya, Malaysia Western Michigan University, Kalamazoo, USA <u>Bachelor of Science cum Laude (with Honours)</u> Major - Computer Science Minors - Computer Information Systems, Mathematics Graduated June 1995 - Cumulative Grade Point Average - 3.59
Professional Education:	Novell Corp. <u>Certified Novell Engineer</u> for IntranetWare (NetWare 4.11), June 1997. <u>Certified Novell Administrator</u> for NetWare 4.1, January 1996.
Secondary School: <u>Sijil Pelajaran Malaysia:</u> (Higher Secondary Certificate)	Sekolah Menengah Penang Free, Pulau Pinang, Malaysia English, Mathematics, Principles of Accounting - A1 Physics, Biology - A2 Geography, Chemistry - C4 GCE 'O' Level English (122/1119) - A2 Aggregate (best 6) - 10 Additional Mathematics - C3 Bahasa Malaysia – C6 Overall Grade – 1
<u>Sijil Rendah Pelajaran:</u> (Lower Secondary Certificate)	English, History, Mathematics, Science, Industrial Arts, Art - A1 Geography - A2 Aggregate - 5 Bahasa Malaysia – C6 Overall Grade - A
Primary School: <u>Standard 5 Assessment Exam:</u>	Sekolah Rendah Kebangsaan Batu Lancang, Pulau Pinang, Malaysia 5 As