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Google search: roger ball, design

## Roger Ball

Curriculum Vitae | January 2023

### Education:

PhD | 2007- 2011 | TU Delft University, Faculty of Engineering | Delft, Netherlands

MFA | 2002-2003 | Product Design (with Distinction), Domus Academy | Milan, Italy

AOCA | 1980-1983 | Industrial Design Diploma, Ontario College of Art and Design | Toronto, Canada

### Administrative experience:

Director Industrial Design | 2015 – 2018 | Georgia Tech Shenzhen Insitutue | USA/SZN

In 2015, the Dean and Chair asked me to found a new MID program in our new Georgia Tech Shenzhen Institute (GTSI)

My leadership included:

- Writing the program application, reports and presentations;
- Leading the program through the curriculum committees and onto approval by the Board of Regents
- Promoting GTID to top Chinese undergrad programs;
- Speaking at GTSI events in China (CPSC);
- Recruiting faculty and students in ATL and SZ.
- Collaborating and developing partnership with Tianjin's ID department

Graduate Program Director | 2015 – 2018 | Georgia Tech | USA

- Lead three graduate programs;
  - MID (Masters of Industrial Design),
  - Msc in HCI/ID (Human Computer Interaction with concentration in Industrial Design)
  - PhD (Industrial Design)
- Write and implement curriculum
- Integrate research concentrations; Smart products, Parametric product design and Universal design into curriculum
- Recruit faculty and students
- Teach studio classes and supervise thesis project.

Graduate Program Leader | 2004 – 2015 | MDes | The Hong Kong Polytechnic University | Hong Kong

Lead three graduate programs;

- Advanced Practices
- Interaction Design
- Design Strategies
- Write and implement curriculum for Advanced Practices
- Recruit faculty and students

Lab Leader | 2015 – present | Body Shape Lab, Georgia Tech | USA

- Develop design tools through primary research.
- Integrate research into curriculum
- Consultancy with industrial partners.

Lab Leader | 2014 – 2017 | China Shape Lab, Hunan University | China

- Manage research personnel and graduate students
- Develop design tools based on Asian Anthropometric primary research.
- Integrate research into curriculum
- Consultancy with industrial partners.

Lab Leader | 2005 – 2015 | Asian Ergonomic Lab, The Hong Kong Polytechnic University | Hong Kong

- Develop design tools based on Asian Anthropometric primary research.
- Develop new curriculum based on original research
- Consultancy with industrial partners.
- Develop international research collaborations and joint research projects.

Co-founder | 2007 – 2010 | SDWorks | The Hong Kong Polytechnic University | Hong Kong

- Founded a business that commercializes student work.
- Develop curriculum to support entrepreneurship.
- Negotiate contracts and licensing agreements.
- Supervise production, packaging, branding and website development.

Program Leader | 2005 – 2011 | I-do Summer Workshop, The Hong Kong Polytechnic University | Hong Kong

- Leader for 6 week international design workshop. Students from 5 countries form teams to work on industry sponsored projects.

Chairman | 1990 – 1992 | Industrial Design Dept , Ontario College of Art and Design | Toronto, Canada

- Develop post graduate curriculum, responsible for budgeting, committee work and promotion of Industrial Design Dept. Recruiting, interviewing and hiring of staff and instructors.

## Teaching Experience:

Associate Chair & Professor | 2015 – 2018 | Georgia Tech - College of Design| USA

- Taught all levels of Industrial Design Program in undergraduate and Masters Programs.
- Courses include; Scan & Print, Design Capstone and Grad Studio 1
- Set up research labs and mentor tenure track Professors and PhD students

Chair Professor 1000 Talents Award | 2015 – 2018 | Hunan University - School of Industrial Design | China

- My mission with this prestigious award is to boost the industrial design capability of Chinese University's
- Develop curriculum and teach at undergraduate and graduate levels
- Set up research labs and mentor tenure track Professors and PhD students

Eric Yim Endowed Professor of Asian Ergonomics | 2013 - 2015 |

- Manage endowment and lead the Asian Ergonomic Central Research Facility. Develop the next generation of China Fit tools.

Professor | 2003 – 2015 | The Hong Kong Polytechnic University | Hong Kong

- Taught all levels of Industrial Design Program in Bachelors and Masters Programs.
- Courses include; Design Studio 3 – Scan & Print, Design Studio 4 - DesignDirect, Ergo-Interactive Experience, Strategic Design , China Lifestyle Transformation and Final Year Project

Assistant Professor (part time) | 1987 – 2003 | Ontario College of Art and Design | Toronto, Canada

- Taught all levels of Industrial Design Program.
- Courses included: Advanced Sports Design, Design for Capital Goods and Services, Universal Design, Visualization and Sketching, Design Methodology, Design Ergonomics and Final Year Project.

Senior Lecturer | 2002-2001 | Sheridan College of Design and Animation | Oakville, Canada

Senior Lecturer | 2002-2001 | Humber College of Advanced Technology | Toronto, Canada

Visiting Professor:

- Visiting Chair Professor – Hunan University, School of Design, CN, 2014
- Visiting Professor – University of Technology Sydney, AU, 2011
- Visiting Professor – TuDelft University, NL, 2009

Research Work:

SizeChina | 2003- 2015 | Director

- This project created the first 3D high resolution digital database of Chinese head and face shapes. We create design tools for students and industry. The goal is to create better fitting products for the Chinese population. The database of over 2000 subjects from six provinces in mainland China was achieved with partners in mainland universities and experts from USA, EU and Hong Kong. Project budget of HK\$ 5.3 million was funded by Hong Kong government and multiple industrial partners.

Product Design for Sustainable Social Development in Ethnic Minority Communities in the Yunnan Province | 2006-2007 | Co-investigator/design team leader

- Team leader of 30 international tutors and students to research, design and develop a line of consumer products based on local skills and materials.

Professional Experience:

Founder & CEO | 1987 –2003 | Paradox Design | Toronto, Canada

- Created a company that provides clients with A-Z creative, manufacturing and testing services. Including: expert concept drawings, logos, packaging, rapid prototyping, production tooling, sourcing of materials and suppliers, standards testing and certification, patent applications and documentation, market research, focus groups, integration of new technology for CAD design and manufacturing.
- Created and developed a series of best selling consumer products.
- Spearheaded Paradox Design's growth from a small regional company into an international award winning enterprise.

Design Lead | 1985 –1987 | Cooper Canada | Toronto, Canada

- Lead design team of twenty designers and support staff.
- Manage two hundred design projects annually including tooling and capital requirements for all projects.
- Responsible for initial production runs of all new products.

Designer | 1982 –1985 | Cooper Canada | Toronto, Canada

- Created original designs for ice hockey, lacrosse and baseball equipment.
- Instrumental in creating the revolutionary and highly successful Cooper Adjustable Batters Helmet. Design of helmet components and liners. Design of wire and plastic facemasks for Canadian, American and European testing and certification.

Patents:

- Holder of twenty US and international patents.

## Partial Client List:

3M, Amazon, Allied Signal, Bell Sports, Brine Inc., Burton Snowboards, Everst&Jennings, Google, Itech Sports, Microsoft, Nike, NeuroSky, Somerville House, Steve Bauer Bicycles, Troxel, Worth Sports.

## Design Awards:

- 2019 Alumni of Influence, Ontario College of Art Design University | CAN
- 2013 1000 Talents Distinguished Scholar | CN
- 2013 Eric S. Yim Endowed Professor of Asian Ergonomics | HK
- 2011 World Impact Design Prize | Finalist
- 2009 Index Award | Finalist
- 2009 President's Award for Research | HKPU
- 2008 DFA (Design for Asia Awards) | Grand Prize
- 2008 Fortune Magazine (China) | Chinas Most Successful Designs
- 2008 IDEA /BusinessWeek | Best in Show
- 2008 IDEA /BusinessWeek | Gold Medal - Research
- 1998 IDEA /BusinessWeek | Silver Medal – Leisure/Sports
- 1998 Design Engineering | Best Consumer Product
- 1998 Virtu Design Competition | Best consumer Product
- 1989 Canadian Plastics | Best Consumer Product
- 1985 IDEA /BusinessWeek | Bronze Medal – Leisure/Sports

## Professional Associations:

- Professional member | American Society for Testing and Materials | ASTM
- Professional member | Industrial Design Society of America | IDSA
- Professional member | Hong Kong Designers Association | HKDSA
- Professional member | Hong Kong Ergonomics Society | HKES
- Professional member | Human Factors and Ergonomics Society | HFES

## Reviewer

- University of Oregon | USA (faculty tenure)
- Mayors office of Cultural Affairs - Atlanta, USA (arts grants)
- University Grants Council - Hong Kong (research grants)
- Canton Fair Design awards (judge)
- Art Center - Los Angeles, USA (China program)
- Shanghai Jiaotong/Liverpool ID program (curriculum)
- Purdue University | USA (faculty tenure)
- Hong Kong Polytechnic University | HK (faculty tenure)
- Baptist University School of Media | HK (faculty tenure)

## Publications:

- Ball, R., "How I learned to stop worrying and love DALL\_E", Innovation; The quarterly of the Industrial Design Society of America (IDSA) 2022 (in press)
- Tian, Y. Ball, R., "Parametric Design for custom-fit eyewear Frames, Heliyon Journal, 2022 (review)
- Ball, R., Mancini, C., "Design for Impact- a trend research method for Industrial Design Education, International Journal of Technology and Design Education 2022 (review)
- Wang, W., Gao, X., Ball, R., "Hybrid Industrial Design Education in the pandemic world, World Design Organization (WDO) Research and Education Forum, Sundhe, China Nov/2022

- Ball, R., Wang, W., Chen, X., "Merging physical and digital controls in Dock-less electric motorcycles". Conference proceedings, International Association of Design Research Conference, Hong Kong 2021
- Tian, T., Ball, R., Wang, W. "Parametric Design Method for Personalized Bras". Handbook of Usability and User-Experience, book chapter, Taylor and Francis, USA 2020
- Huang, X., Ball, R., "Comparative study of Industrial design Education in China and USA". International Journal of Technology and Design Education 2020
- Ball, R., Wang, H., Luximon, Y., Scan&Print- A Design method for Wearable Products. Journal of Design and Ergonomics, USA, 2019
- Ball R. Luximon, Y. Overhill H., 2018 "Headsets; A Design Handbook for Sound and Shape", Output Publishing, Hong Kong
- Ball R., 2014 "A Digital design method for Human Body Fit", Human Factor and Ergonomics in Consumer Product Design: Chapter 9, Taylor and Francis, USA
- Ball, R., 2013 "Designing Headgear, Designing Apparel for Consumers: the impact of body size and shape, chapter 20, Woodhead Publishing, UK
- Ball R. Overhill H., 2012 DesignDirect -how to start your own microbrand., Ptec, Hong Kong
- Ball R, 2012 "Designing Protective Headgear. Human Factors and Ergonomics in Consumer Product Design; Uses and Applications, chapter 19, Taylor and Francis, USA
- Ball R., Luximon Y. and Chow H.C.E., 2011. "Anthropometric Study on Chinese Head," submitted to Asian Workshop on 3D body scanning technology, Tokyo, Japan, 19-20 April 2011.
- Ball R. and Luximon Y., 2011. "A comparison of different methods for head measurements", International Journal of Human Factors Modeling and Simulation.
- Luximon Y., Ball R. and Justice L., 2011. "The 3D Chinese head and face modeling," Computer-Aided Design.
- Ball R, 2011 "SizeChina- A 3D Anthropometric Survey of the Chinese Head", Doctoral thesis ISBN 978-9051550054-2
- Ball R., Shu C., Xi P., Rioux M., Luximon Y. and Molenbroek J., 2010. "A comparison between Chinese and Caucasian head shapes," Applied ergonomics, 41 (6): 832-839.
- Luximon Y., Ball R. and Justice L., 2010. "The Chinese face: A 3D anthropometric analysis," Proceeding of the TMCE2010, April 12-16 2010, Ancona, Italy.
- Daanen, H.A.M., Krul, A.J., Ball, R., 2010. "Face dimension requirements for passports," Journal of the British Travel and Health Association, 15, 53-56.
- Ball, R.M., 2009. "3-D design tools from the SizeChina project." Ergonomics in Design, 17(3), 8-13(6).
- Reitenbach, M.E.F.R., Jochems, A.J., Molenbroek, J.F.M., Ball, R., van Eijk, D.J., 2009. "User Experience of Office Chairs and Anthropometrics of Female Chinese and Hong Kong Chinese Office and Factory Workers" (the TU Delft Institutional Repository). The Ergonomics Open Journal 2(1), 1-12.
- Ball, R.M., 2008. "SizeChina: The world shapes up." Innovation, Fall 2008, 158-161.
- Ball, R.M., Molenbroek, J.F.M., 2008. "Measuring Chinese Heads and Faces." Proceedings of the 9th International Congress of Physiological Anthropology, Human diversity: Design for life. Delft, the Netherlands, 150-155.
- Bracht, P., Visser, A.A., Ball, R., 2008. "I do: a pressure cooker model for the experience of cultures and design." Proceedings of Business of Education Week, Hong Kong, 2008.
- Hu, Catherine., Ball, R., 2007. "The Only Connect Experience"" Proceedings of Industrial Design Society of America (IDSA.)

## Research Fundraising - Principal Investigator:

- Ball R. (2018), "Parametric Product Design," Google Research Award, Google, USA USD\$87,000.
- Ball R. and Luximon Y. (2012), "Development of 3D Chinese head and face prediction model for product design," General Research Fund- Hong Kong Government, HK\$741,600.
- Ball R. and Luximon Y. (2010), "Development of 3D Chinese head and face prediction model for product design," The Hong Kong Polytechnic University, HK\$105,000.
- Ball R., Justice L. and Luximon Y. (2009), "A 3D design tool for Chinese fit product design," School board Chairman Reserve, The Hong Kong Polytechnic University, HK\$999,520.
- Justice L., Ball R. and Luximon Y. (2009), "Development of 3D digital ergonomic design tools," The Hong Kong

Polytechnic University Postdoctoral fellowship HK\$736,000.

- Ball R. (2006), "Perfect fit China," DesignSmart Initiative (DRS/002/04), HK\$6,487,000.

#### Industry research collaborations:

- |                                       |                                |
|---------------------------------------|--------------------------------|
| • Philips Research Laboratories       | • Microsoft Laboratories       |
| • Manufacture Cartier Lunettes        | • Bose Research Laboratories   |
| • Delft University of Technology      | • Cirque de Soleil             |
| • HKSM Macao Commercial Offshore Ltd. | • Neurosky Technologies        |
| • Trek Bicycle Corp.                  | • Honeywell Industries         |
| • DECATHLON campus   OXYLANE research | • Next Media Animation Limited |
| • Revision Eyewear                    | • Logitech                     |
| • Google Daydream Project             | • Anthrotech                   |
| • 3M                                  | • Fisher & Paykel              |

#### Invited Speaker (from 2007):

Consumer Product Safety Commission Conference, Designing for the US market, Guangzhou, 2019, CN

Alumni of Influence Award, Design Trends for ID, Ontario College of Art and Design University, 2019, CAN

Modern Atlanta, Residence Conversations Technology, Design and Creative Industries, 2018, USA

ICSID - World Design Impact Prize | Feb 2012 | SizeChina – The Impact of Design | ICSID Awards Helsinki | FN

DesignKorea | Oct 2011 | SizeChina - Smart tools for Designers, Design Korea Conference, Seoul | KR

INCLUDE Design Conference | April 2011 | SizeChina - Design for diversity, Keynote Speaker, Royal College of Art | UK

INDEX Awards | Oct / 2010 | SizeChina - Design to Improve Life, Keynote Speaker, Index Design Awards Shanghai | CN

ISRP | Oct / 2010 | Comparison of Chinese and Caucasian Headshapes, Keynote Speaker, International Society for Respiratory Protection | HK

ErgoDesign Forum | May 2009 | Anthropometric Design Tools for China, Keynote Speaker | FR

ICPA | Aug / 2008 | SizeChina. The Shape of Things to Come, Keynote Speaker, International Conference of Physical Anthropology | NL

BODW | Dec / 2007 | SizeChina. Unlocking the riddle of Chinese fit, Business of Design Week, HK | HK

Connecting 07 | Oct / 2007 | Size China. A Whole new world of Ergonomics. IDSA/ICSID, San Francisco | USA

Die Mitte. Dialogues about Design | Oct / 2007 | SizeChina. What the West needs to know, Keynote speaker. University of Applied Arts, Vienna | Austria

i-do Workshop | July / 2007 | Sustainable Design for Ethnic Minorities in Yuunan province, Yuunan University, Yunnan | CN

#### Exhibitions:

- Atlanta Design Week : Georgia Tech ID Capstone exhibition | | This is an annual Design exhibition in collaboration with the MA!Design is Human organization. GTID receives a free exhibition space and a two-page feature article in their annual exhibition catalogue. 2016- present | Atlanta | USA

Hong Kong: Creative Ecologies — Business, Living, Creativity Hong Kong Design Centre | 5 Feb - 11 May 2011 | Hong Kong Heritage Museum, Hong Kong, China

INDEX: Best of Index Exhibition 2009. Touring China & India | INDEX: the Danish Ministry of Foreign Affairs

- Mumbai, India | 1-10 February 2011
- Mantri Square, Bangalore, India | 16-26 January 2011
- Avenue Of Stars, Tsim Sha Tsui, Hong Kong, China | 25 November - 2 December 2010

- No. 128 Yuancun 4 heng Lu, Tianhe District, Rectory, Guangzhou, China | 27 October - 7 November 2010
- No. 32 Qinhuangdao Rd., Yangpu District, Nordic Lighthouse, Shanghai, China | 5-20 October 2010

A Hong Kong SAR programme for EXPO 2010 Shanghai (Hong Kong Creative Ecologies) | 15 May - 31 October 2010 | Hong Kong Design Centre, The Bridge 8 Phase III, No. 550 Ju Men Road, Lu Wan District, Shanghai, China

Norm=Form, on standardization and design | Foundation Design Den Haag

- Zeche Zollverein, Halle 5, Schaft XII (A5), Gelsenkirchenerstrasse 181, Essen, Germany | 28 August - 17 October 2010
- Gemeentemuseum Den Haag, Stadhouderslaan 41, The Hague, The Netherlands | 8 May - 15 August 2010

Utrecht Manifest 2009: Urgent Methods: Design Education Examined | 4 October 2009 - 15 November 2009 | Utrecht Manifest Jongeriusvilla, Kanaalweg 64, Utrecht, The Netherlands

INDEX: Award Exhibition - Design to Improve Life

- INDEX:, Municipality of Ishøj | Ishøj By Centre, Ishøj, Denmark | 15 February - 1 March 2010
- INDEX:, Municipality of Hillerød | SlotsArkaderne, Hillerød, Denmark | 1-21 February 2010
- INDEX:, INDEX: Partner City Singapore | VivoCity, HarbourFront precinct, Singapore | 10 November - 9 December 2009
- INDEX: Seoul Design Olympic | Air Dome at Jamsil Main Stadium, Seoul, South Korea | 9-29 October 2009
- INDEX: Kongens Nytorv square, Copenhagen, Denmark | 21 August - 13 September 2009

Winning IDEAs: Selected Product Designs 2008 | 16 April - 25 October 2009 | IDSA (Industrial Designers Society of America) | The Cameron Art Museum, 3201 South 17th Street, Wilmington, NC 28412, USA

Business Of Design Week (BODW) (HKTDC Inno Design Tech Expo 2008) | 10-12 December 2008 | Hong Kong Trade Development Council, Hong Kong Science and Technology Parks Corporation, Hong Kong Design Centre, Hong Kong Convention and Exhibition Centre, Hong Kong, China

2008 IDSA International Conference and Exposition | 10-13 September 2008 | IDSA (Industrial Designers Society of America) 2008 IDSA National Conference Polar Opposites, Phoenix, AZ, USA

## Research Media Coverage:

### Television/Radio

- |   |                                    |
|---|------------------------------------|
| • Oriental TV, 25/11/2010               | • Commercial Radio, 17/09/2007     |
| • HKBN News, 27/06/2009                 | • RTHK, 17/09/2007                 |
| • PolyU Youtube Channel, 01/2009        | • China National Radio, 17/09/2007 |
| • RTHK, "TechnoFrontier" Series, 2008   | • TVB PEARL News, 17/09/2007       |
| • NOS (Dutch National Television), 2008 | • TVB JADE News, 17/09/2007        |
| • RTHK, "PolyU 70th", 27/01/2008        | • CNN International, 11/04/2006    |
| • Plastics News, 03/12/2007             | • RTHK (radio), 07/04/2006         |
| • CBC Radio 2007                        | • ATV News, 04/04/2006             |
| • Phoenix TV, 17/09/2007                | • Star News Asia, 24/09/2007       |

### Print Media

- |   |  |
|---|--|
| • Designsmart Initiative, 2010   (HK)       | • Sing Tao Daily, 24/06/2009   (HK)    |
| • Norm=Form, Spring 2010   (NL)             | • The Sun Newspaper, 24/06/2009   (HK) |
| • Hong Kong: Creative Ecologies 2010   (HK) | • Wen Wei Po, 24/06/2009   (HK)        |
| • Oriental Daily, 30/11/2010   (HK)         | • Sohu.com, 23/06/2009   (CN)          |
| • The Sun Newspaper, 26/11/2010   (HK)      | • www.news.cn, 23/06/2009   (CN)       |
| • Oriental Daily, 26/11/2010   (HK)         | • Ming Pao, 13/12/2008   (HK)          |

- Avernue of Stars, 19/11/2010 | (HK)
- Sing Tao Daily, 11/12/2008 | (HK)
- NRC Handelsblad, 19/05/2010 | (NL)
- HKDC Awards' 08, 11/2008 | (HK)
- South China Morning Post, 24/06/2009 | (HK) • AM 730, 09/10/2008 | (HK)
- AM730, 24/06/2009 | (HK)
- Innovation, Fall 2008 | (USA)
- HK Headline Daily, 24/06/2009 | (HK)
- The Standard, 12/08/2008 | (HK)
- Ming Pao, 24/06/2009 | (HK)
- Metro Daily, 24/06/2009 | (HK)
- Oriental Daily, 24/06/2009 | (HK)
- INDEX:AWARD,08/2009 | (DK)
- Sing Pao Daily News, 24/06/2009 | (HK)
- Toronto Star, 26/07/2008 | (CAN)

## Professional work:

### Electronic Media

- CNN International, interview, 27/06/2006 | (INT)

### Design Books

- 50 Sports Wares | Rotovison Design Series 01/07/1999 | ISBN 2-88046-418-8 | (UK)

### Print Media

- Globe and Mail Report on Business, 04/01/2001 | (CAN)
- Design Product News, 01/04/2000 | (CAN)
- Cadkey Magazine, 01/08/1999 | (USA)
- BusinessWeek Magazine, 24/05/1998 | (USA)
- Injection Molding Magazine, 01/07/1999 | (USA)
- Toronto Star, 08/04/1990 | (CAN)