Abdelrahman Kamel Siddek Abdelhamed

 \mathbf{CV}

PhD Student

Department of Electrical Engineering and Computer Science Lassonde School of Engineering York University 4700 Keele St, Toronto, ON, Canada M3J 1P3 +1 (647)-916-3513 kamel@eecs.yorku.ca http://www.eecs.yorku.ca/~kamel/ https://scholar.google.com/citations?user=5smK7uUAAAAJ

RESEARCH INTERESTS General: Computer Vision, Image Processing, Computational Photography, Machine Learning, Human Computer Interaction.

Specific: Noise Modelling, White Balance, Mobile Interfaces, Nearest Neighbour Search, Multimedia Retrieval.

EDUCATION

York University, Toronto, Canada

PhD, Computer Science

[Expected: Summer 2020]

· Advisor: Prof. Michael S. Brown

National University of Singapore, Singapore

MSc, Computer Science

[December 2016]

- Thesis: Two-Illuminant Estimation and User-Preferred Correction for Image Color Constancy
- Advisor: Prof. Michael S. Brown
- CAP: 4.38 / 5
- Courses: CS6210 The art of computer science research, CS6234 Advanced algori-thms, CS5240 Theoretical foundations in multimedia, CS5248 Systems support for continuous media, CS6101 Exploration of computer science research

Assiut University, Egypt

MSc, Computer Science

[March 2014]

- Thesis: Real-Time Large-Scale Content-Based Image Retrieval
- Best MSc thesis award, Assiut University
- Advisors: Prof. Yousef B. Mahdy and Assoc. Prof. Khaled F. Hussain
- Courses: CE611 Modern Computer Architectures, CS611 Data Compression, CS614 Software Reliability and Reusability, CS612 Object Oriented Software Engineering, and CS618 Advanced Topics in Computer Science

BSc, Computer Science

[June 2009]

- Grade: Distinction with Honor, GPA: 90%, 1st of Computer Science program.
- Graduation project: Building a Virtual Supercomputer based on Grid Computing (C# and .NET Remoting)
- Best MSc thesis award, Assiut University
- Advisor: Prof. Yousef B. Mahdy

EXPERIENCE

Research Intern (Computer Vision and Machine Learning),

[Oct. 2018 - Apr. 2019]

Borealis AI

Teaching/Research Assistant, York University

[2017 - present]

- CS2011 Data structures
- CS2030 Advanced object oriented programming
- CS1012 Net-centric introduction to computing

Teaching Assistant, National University of Singapore

[2015 - 2016]

· CS2010 Data structures and algorithms II

Assistant Lecturer, Assiut University

[2014 - 2015]

Teaching/Research Assistant, Assiut University

[2009 - 2014]

Introduction to computer science with C, Structured and OOP programming in C++, Visual programming in C#, Compilers theory, Computer systems security, Computer organization and architecture

PUBLICATIONS

- 5. MarkWhite: An Improved Interactive White-Balance Method for Smartphone Cameras Abdelrahman Abdelhamed, MacKenzie I. S., Brown M. S. *Graphics Interface (GI)*, 2019 PDF
- 4. A High-Quality Denoising Dataset for Smartphone Cameras Abdelrahman Abdelhamed, Lin, S., Brown M. S. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018 PDF | Project | Code
- 3. Two Illuminant Estimation and User Correction Preference Cheng D.*, Abdelrahman Kamel*, Price, B., Cohen, S., Brown M. S. * Equal Contribution IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016 PDF | Project
- Multi-Bin Search: Improved Large-Scale Content-Based Image Retrieval Abdelrahman Kamel, Yousef B. Mahdy, Khaled F. Hussain International Journal of Multimedia Information Retrieval (IJMIR), 2014 PDF
- Multi-Bin Search: Improved Large-Scale Content-Based Image Retrieval Abdelrahman Kamel, Yousef B. Mahdy, Khaled F. Hussain International Conference on Image Processing (ICIP), 2013 PDF

Papers Under Review

1. AFIF⁴: Deep Gender Classification based on AdaBoost-based Fusion of Isolated Facial Features and Foggy Faces

Mahmoud Afifi, Abdelrahman Abdelhamed

Journal of Visual Communication and Image Representation (under review) PDF

Awards

York University, Canada

AdeptMind Scholarship	[2018 - 2019]
Ontario Trillium Scholarship (OTS)	[2017 - 2018]
Lassonde Graduate Entrance Scholarship (LGES)	[2017]
York Graduate Scholarship (YGS)	[2017]

National University of Singapore

• NUS Research Scholarship [2015 – 2016]

Assiut University, Egypt

• Best MSc thesis award [2016]

Professional Service

Workshop/Challenge organizer and program committee member, NTIRE: New Trends in Image Restoration and Enhancement workshop and challenges at CVPR 2019

Website chair, IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2018

Reviewer

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2019
- International Conference on Computer Vision (ICCV) 2019
- British Machine Vision Conference (BMVC), 2018, 2019
- IEEE Winter Conference on Applications of Computer Vision (WACV), 2019
- Conference on Computer and Robot Vision (CRV), 2019
- IET Computer Vision
- Signal Processing

ACTIVITIES & LEADERSHIP

- Leader of BSc Graduation Project team, Assiut University [2009] • Manager of many students' graduation projects, Assiut University [2009-2015] • Organizer of student programming competitions, Assiut University [2009-2015] • Conducting talks, presentations, workshops, and tutorials on High [2014-2015]
- Performance Computing (HPC) Labs, Assiut University • IEEE Student Member

Presentations

• A guiding talk on "How to get a PhD scholarship" for BSc and MSc students, **Assiut University**

[2015]

- Linking Cinema to the Scientific Method, "Interstellar: The Scientific Method", National University of Singapore
- [2016]

TRAINING

Cisco Systems, Inc.

- CCNA Exploration: Network Fundamentals [2010] • Developing Local Talent in Technology (DLTT)
 - [2010]

Assiut University

- University Teacher Preparation [2013] • Credit Hours Systems [2011] • Strategic Planning [2010] • Student Evaluation Systems [2010]
- Scientific Conference Organization

[2010]

Programming Skills &

- Python, MATLAB, C++, C#, JAVA, PHP, Ruby, HTML/CSS, JavaScript, SQL
- TensorFlow, Matlab, Matlab's Neural Network Toolbox, MatConvNet, Android SDK, Android Camera2 API, OpenCV, MPI, MPI.NET, MapReduce/Hadoop, .NET Framework, .NET Remoting, Libraries MySQL, SQL Server

References

Michael S. Brown

Professor, Canada Research Chair in Computer Vision +1 (416)-736-2100 x66675 EECS Dept., Lassonde School of Engineering mbrown@eecs.yorku.ca York University, Canada

I. Scott MacKenzie

Professor +1 (416)-736-2100 x40631 EECS Dept., Lassonde School of Engineering mack@eecs.yorku.ca York University, Canada

Brian Price

Senior Research Scientist, PhD Creative Intelligence Lab, San Jose Adobe Research, USA

bprice@adobe.com

Yousef B. Mahdy

Professor, Head of Department of Computer Science Faculty of Computers and Information Assiut University, Egypt ybmahdy@fci.au.edu.eg

Khaled F. Hussain

Associate Professor, Department of Computer Science khussain@aun.edu.eg
Vice Dean for Community Services and Environmental Development
Faculty of Computers and Information
Assiut University, Egypt



April 13, 2019