




# Jerry Ajay

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CONTACT INFORMATION Davis 340, Dept. of Computer Science and Eng.,  
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RESEARCH INTERESTS Technology-based Physical Rehabilitation, Smart Healthcare, Computer Systems, Machine Learning, Signal and Feature Engineering, Virtual and Augmented Reality.

EDUCATION *The State University of New York at Buffalo*, USA. 2015 - present

- Doctorate of Philosophy in Computer Science & Engineering.
- Advisor: Dr. Wenyao Xu

*The State University of New York at Buffalo*, USA. 2013 - 2015

- Master of Science in Computer Science.

*University Visvesvaraya College of Engineering*, Bangalore, India. 2009 - 2013

- Bachelor of Engineering in Computer Science.

## PUBLICATIONS

### Relevant (R):

- [R1] **Jerry Ajay**, Chen Song, Aosen Wang, Jeanne Langan, Zhinan Li, and Wenyao Xu, “A Pervasive and Sensor-Free Deep Learning System for Parkinsonian Gait Analysis”, *Biomedical and Health Informatics (BHI 2018)*, Las Vegas, USA.
- [R2] Feng Lin, **Jerry Ajay**, Jeanne Langan, Lora Cavuoto, Ifeoma Nwogu, Heamchand Subryan, and Wenyao Xu, “A Portable and Cost-Effective Upper Extremity Rehabilitation System for Individuals with Upper Limb Motor Deficits”, *Wireless Health (WH 2016)*, Bethesda, USA.
- [R3] Yen-Lung Lin, Pavlos Pavlidis, Emre Karakoc, **Jerry Ajay**, and Omer Gokcumen, “The Evolution and Functional Impact of Human Deletion Variants shared with Archaic Hominin Genomes”, *Molecular Biology and Evolution (MBE Journal, Jan. 2015)*.

### Others (O):

- [O1] **Jerry Ajay**, Chen Song, Aditya Singh Rathore, Chi Zhou, and Wenyao Xu, “3DGates: An Instruction-Level Energy Analysis and Optimization of 3D Printers”, *Architectural Support for Programming Languages and Operating Ssystems (ASPLOS 2017)*, Xi’an, China.
- [O2] Oliver Kennedy, **Jerry Ajay**, Geoffrey Challen, and Lukasz Ziarek, “Pocket Data: The Need for TPC-MOBILE”, *Transaction Processing Performance Council Technology Conference (TPCTC 2015)*, Maui, USA.

### Workshops (W):

- [W1] **Jerry Ajay**, Aditya Singh Rathore, Chen Song, Chi Zhou, and Wenyao Xu, “Don’t Forget Your Electricity Bills!: An Empirical Study of Characterizing Energy Consumption of 3D Printers”, *Asia-Pacific Workshop on Systems (APSys 2016)*, Hong Kong, China.
- [W2] Geoffrey Challen, **Jerry Ajay**, Nick DiRienzo, Oliver Kennedy, Anudipa Maiti, Anandatirtha Nandugudi, Sriram Shantharam, Jinghao Shi, Guru Prasad Srinivasa, Lukasz Ziarek, “maybe We Should Enable More Uncertain Mobile App Programming”, *Workshop on Mobile Computing Systems (HotMobile 2015)*, Santa Fe, USA.

## INTERNSHIPS

Research Intern

**HPE Labs - Summer 2015**, Palo Alto, USA. (Mobility & Networking Group)

**Project** : Seamless migration of Bluetooth Low Energy connections in wearables.

**Mentors** : Shahriar Nirjoin and Kyu-Han Kim

Software Development Intern

**Crowdbouncer Inc. - Summer 2014**, Buffalo, USA.

**Project** : Webpages for a real estate website.

**Technologies** : Drupal.

Remote Software Development Intern

**Cognizant Technology Solutions - Spring 2013**, Chennai, India.

**Project** : A gamified travel booking app on Cognizant's internal platform.

**Technologies** : Microsoft Visual Studio, Javascript.

## ACCOMPLISHMENTS

- Concept of pervasive gait analysis in geriatric individuals using smart-insoles took 2<sup>nd</sup> place in University at Buffalo's Ageing Challenge, 2018.
- Poster showing study on stroke individuals using smart-insoles took 2<sup>nd</sup> place in the annual meeting of Networking in Ageing of Western New York 2018, Buffalo, USA.
- Poster of Deep Learning-based Parkinsonian Gait Analysis took 3<sup>rd</sup> place in Biomedical and Health Informatics (BHI 2018), Las Vegas, USA.
- Hardware solution for ensuring safe 3D printing took 2<sup>nd</sup> place in the Hardware Design Contest at Design and Automation Conference (DAC 2017), Austin, USA.
- Travel grants to present research at ASPLOS 2017, DAC 2017, HotMobile 2015, and BHI 2018.

## POSITIONS HELD

**Teaching Assistant**(Aug.'15-May'16): 1) Realtime Embedded Systems, and 2) Operating Systems.

**Research Assistant**(May'16-present): Embedded Sensing and Computing Lab, SUNY Buffalo - Dept. of Computer Science and Eng.

**Summer Instructor**(Summer '18): Introduction to Operating Systems.

## IT FORTE

**Languages most familiar with:** *Python, Matlab, L<sup>A</sup>T<sub>E</sub>X*.

**Editors most familiar with:** vim, PyCharm, Jupyter Notebook.

**Operating Systems:** *Linux*(for development), *Windows*(for writing and illustration).

## REFERENCES

- Advisor - Dr. **Wenyao Xu**, Assistant Professor, Dept. of Computer Science and Eng., The State University of New York at Buffalo, USA.
- Dr. **Jeanne Langan**, Assistant Professor, Dept. of Rehabilitation Science, The State University of New York at Buffalo, USA.
- Dr. **Chi Zhou**, Assistant Professor, Dept. of Industrial and Systems Eng., The State University of New York at Buffalo, USA.
- Dr. **Bina Ramamurthy**, Associate Teaching Professor, Dept. of Computer Science and Eng., The State University of New York at Buffalo, USA.