# Eddie Yan

eqy@cs.washington.edu

`https://linux.ucla.edu/~eqy`

| | | |
|---|---|---|
| **Education** | University of Washington | |
| | Graduate Student in Computer Science and Engineering | 2015 — Present |
| | Current GPA: 3.93 | |
| | | |
| | University of California, Los Angeles | |
| | B.S. Electrical Engineering, Computer Engineering Focus | 2011—2015 |
| | GPA: 3.78 | |

**Experience**

**Intern,** NVIDIA Research        June 2017 — September 2017
- Novel techniques to improve warp execution efficiency in irregular applications
- Mentors: Daniel Johnson, Mark Stephenson

**Research Assistant,** Sampa Lab, UCLA        October 2015 — Present
- Specializing storage for image data
- Evaluating techniques for machine learning acceleration
- Advisor: Luis Ceze

**Research Assistant,** The Ozcan Lab, UCLA        October 2013 — June 2015
- Software development in telemedicine and mobile health
- Porting MATLAB® code to Java/C++/OpenCV
- Android application development

**Research Assistant,** UCLA Applied Mathematics REU    June 2013 — August 2013
- Development of machine learning based computer-aided diagnosis tools for bilateral temporal lobe epilepsy
- Implemented spectral clustering and feature selection algorithms in MATLAB®
- Experimented with SVM libraries: Weka, LIBSVM

**Research Assistant,** Masmanidis Lab, UCLA        October 2012 — June 2013
- Optimized spike sorting analysis of electrophysiological data through MATLAB®
- Implemented an algorithm to automatically evaluate the quality of merged waveforms
- Used principal component analysis to evaluate the separation of waveforms

**Research Volunteer,** Semel Institute, UCLA        October 2012 — June 2013
- Streamlined research workflow through automation
- Experimented with shell scripting and the Google Drive API

| | | |
|---|---|---|
| **Skills** | <u>Languages:</u> | MATLAB®, C++, C, Python, Java, Bash, LaTeX |
| | <u>Other Skills:</u> | x86 PC Assembly and Repair, UCLA IEEE OPS Graduate (Soldering, Breadboard prototyping) |

| | |
|---|---|
| **Github** | `https://github.com/eqy` |

| **Publications** | **Customizing Progressive JPEG for Efficienct Image Storage** |
|---|---|

**Customizing Progressive JPEG for Efficienct Image Storage**

Eddie Yan, Kaiyuan Zhang, Xi Wang, Karin Strauss, Luis Ceze
*HotStorage 2017*

`https://www.usenix.org/system/files/conference/hotstorage17/hotstorage17-paper-yan.pdf`

**Master Maker: Understanding Gaming Skill through Practice and Habit from Gameplay Behavior**

Jeff Huang, Eddie Yan, Gifford Cheung, Nachiappan Nagappan, Thomas Zimmermann
*Topics in Cognitive Science*

`https://doi.org/10.1111/tops.12251`

**An Evaluation of Contemporary Heterogeneous Computing Platforms for Data Intensive Applications** (short paper)

Vincent T. Lee, Carlo C. del Mundo, Eddie Yan, Armin Alaghi, Mark Oskin, Luis Ceze
*Fourth Workshop on Efficient Data Center Systems (EDCS), 2016*

`http://homes.cs.washington.edu/~vlee2/docs/vlee-edcs-2016.pdf`

**Masters of Control: Behavioral Patterns of Simultaneous Unit Group Manipulation in StarCraft 2**

Eddie Yan, Jeff Huang, Gifford Cheung
*CHI 2015*

`http://dl.acm.org/citation.cfm?id=2702429`

**Imaging and Sizing of Single DNA Molecules on a Mobile Phone**

Qingshan Wei, Wei Luo, Samuel Chiang, Tara Kappel, Crystal Mejia, Derek Tseng, Raymond Yan Lok Chan, Eddie Yan, Hangfei Qi, Faizan Shabbir, Haydar Ozkan, Steve Feng, and Aydogan Ozcan
*ACS Nano*

`http://pubs.acs.org/doi/abs/10.1021/nn505821y`

**Detection and Spatial Mapping of Mercury Contamination in Water Samples using a Smart-Phone**

Qingshan Wei, Richie Nagi, Kayvon Sadeghi, Steve Feng, Eddie Yan, So Jung Ki, Romain Caire, Derek Tseng, and Aydogan Ozcan
*ACS Nano*

`http://pubs.acs.org/doi/abs/10.1021/nn406571t`

| **Misc. Past Projects** | *A Ray Tracing Analysis of Efficiency Enhancement of InGaN Based Light Emitting Diodes Through Geometric Chip Modifications* | 2011 |
|---|---|---|
| | *An Analysis of Clock Rate and Thermal Scaling in Modern Multi-Core Microprocessors* | 2010 |

| **Academic Honors** | Member, Tau Beta Pi - California Epsilon | 2012 — |
|---|---|---|
| | Member, Eta Kappa Nu | 2012 — |
| | Intel Science Talent Search Semifinalist (project listed above) | 2011 |
| | National Merit Finalist | 2011 |