

Mostafa Elshamy Los Angeles, CA · <http://m-elshamy.appspot.com>

## Education

- 8/14 **ms Computer Science, University of Southern California** — GPA 3.9  
Key classes: Web Tech · Interactive Media Design · UI design · Performance (Guitar)  
Awards: Research Assistantship, \$29k/semester, USC
- 11 **BS Computer Science and Engineering, German University in Cairo** — highest honors · GPA 0.9/A+ · RANK 9/102  
Key classes: Software Engineering · HCI · HCI for Startups  
Awards: Academic Excellence (2), \$6.8k · Conference Grant, \$1.3k · Software Engineering Cup · Best DB project
- 6 **General Certificate of Secondary Education, Victory College in Cairo** — 98.7% · top 1% in Egypt  
Awards: Award for Academic Achievement, Ministry of Education

## Experience

- 8/12 - Current **Research Assistant**  
*usc Institute for Creative Technologies*  
AngularJS, Node.js, Express, Jade, MongoDB, Python, HTML5, CSS3, Underscore.js
- Studying human gaze behavior using eye tracking to create novel/realistic human-computer interaction.
  - Set up a state of the art eye tracking lab on a **\$40k** budget.
  - Cut costs **\$8k** by building an in-house gaze analysis/visualization app.
- 6/12-7/12 **Front-end Developer**  
10/9-2/10 *Robusta Studio (Contractor)*  
HTML5, CSS3, JS, Photoshop
- Delivered pixel perfect/search engine optimized (SEO) UI code for Kareem Reda Photography given reference PSDs.
  - Boosted progress on The Honey Gift (overdue project) by delivering pixel perfect UI code given reference PSDs.
- 10/11-2/12 **Research Assistant**  
3/10-7/10 *German Research Center for AI (DFKI)*  
Java, Weka, Processing, Mercurial, Git, inDesign, Premiere
- Improved accuracy of a gaze based classifier of text comprehensibility by employing machine learning techniques from **54% to 69% (+15%)**.
  - Created the eyePad (part of the open source Text 2.0 project), a multi-modal book reader for tablets which supports adaptive storylines integrating gaze, handwriting and speech I/O and used it to evaluate novel human-text interaction techniques.
  - The eyePad was featured in **media reports** and a **tweet** by *Tobii Technology*.
- 10/10-9/11 **Web Designer/Developer**  
*German University in Cairo (Contractor)*  
HTML5, CSS3, JavaScript, Photoshop, Illustrator
- Unified the UX of **5** student webapps.
  - Created a website and logo for the Renewable Energy Research Center.
  - Maintained front-end/visual design of the GUC Research Repository as new features were being added.
- 7/9-2/10 **Web Designer/Developer Intern**  
*German University in Cairo*  
Java, HTML, CSS, JavaScript, jQuery
- Improved research accessibility through the GUCRR, a repository based on a 3-tier architecture (Wicket, Spring, Hibernate).
  - Created a template for small sites, which is still being used for university events.

## Selected Projects

- Ongoing **Dali** Basic CSS modules for every project. CSS
- Ongoing **Drogon** Superhumble Node.js static site generator. Node.js, Google App Engine
- 13 **BnB** Board game for children where bunnies battle for berries. Illustrator, inDesign
- 13 **Damsel in Distress** Online recombinant narrative game exploring gender issues. Node.js, AngularJS, Google App Engine

## Publications

- 12 Biedert, Elshamy, Buscher and Dengel. **Towards Robust Gaze-Based Objective Quality Measures for Text**. ETRA.
- 11 El Hosseiny (Elshamy), Biedert, Dengel and Buscher. **The eyePad - Tom Riddle in the 21st Century**. EGIHMI, 75-78.

## Activities

- 13 Introduced 4th-graders at The International School at Mesa del Sol to eye tracking tech.
- 12 Student Volunteer at the International Conference on Multimodal Interaction.
- 10 - Current Active participation on the Stack Exchange Q & A network (CSS, HTML, JavaScript and UX).
- 8 Music working group at the Ludwig Maximilian University of Munich (LMU)