



Montague-CTE Scholar Dylan Shell (2014-15) Dwight Look College of Engineering



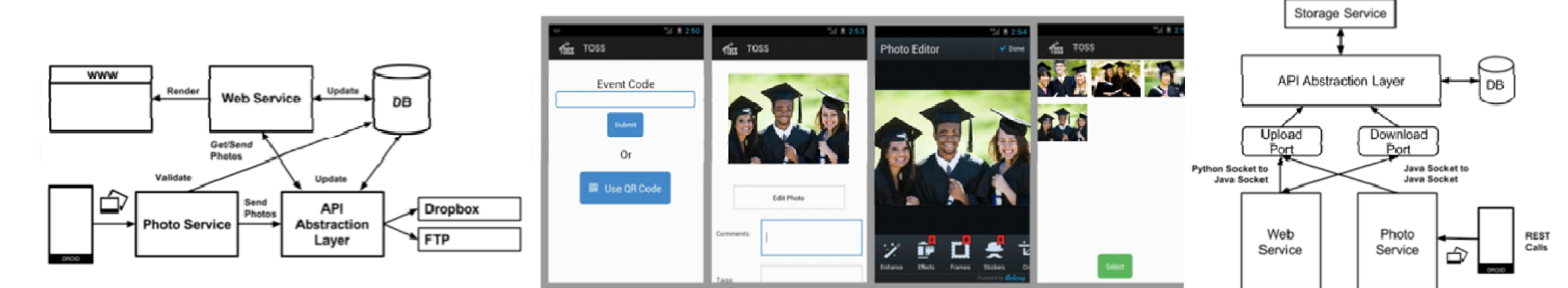
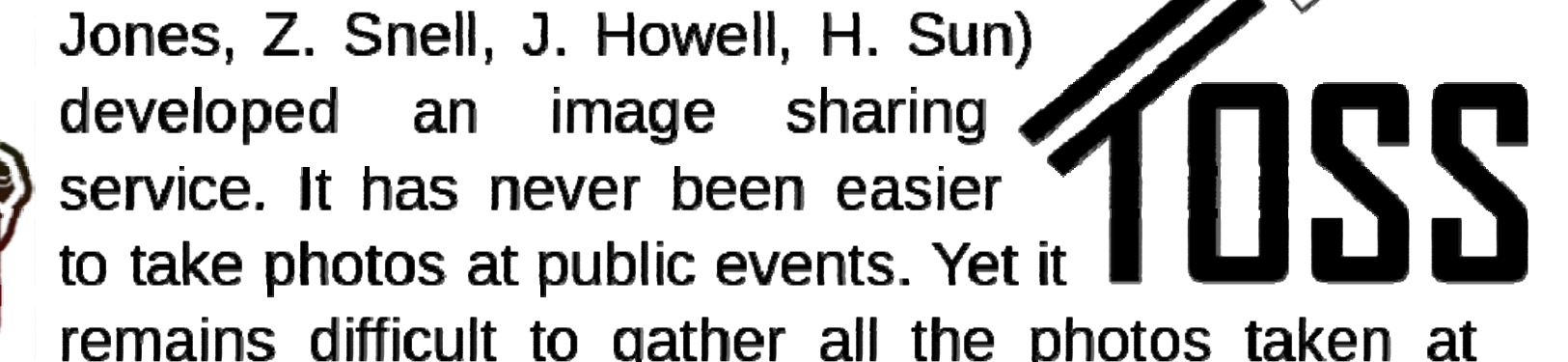
**CENTER FOR
TEACHING EXCELLENCE**
TEXAS A&M UNIVERSITY

As an educator in the Department of Computer Science and Engineering, my job involves bringing clarity, insight, and rigor to endeavors that are largely analytical, technical, and mathematical. These things are sometimes seen as dry – but they needn't be so! My teaching philosophy is to maintain students' inherent enthusiasm, sense of wonder, and appreciation of creativity. The funds awarded to me as Montague-CTE Scholar 2014-15 for the Dwight Look College of Engineering enabled me to conduct activities to more closely align my teaching with the needs of our community here in Texas, embrace the service oriented values of the Aggie family, and also work on public outreach activities.

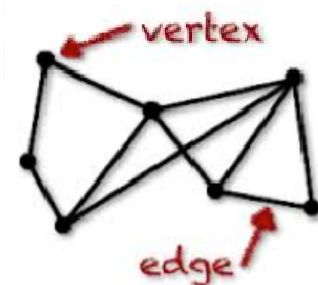


Motivated by privacy concerns regarding images published from AggieCon, a group of students (G. LaFlash, P. O'Loughlin, K. Jones, Z. Snell, J. Howell, H. Sun)

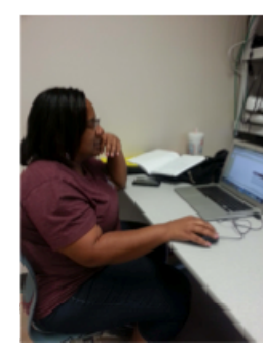
developed an image sharing service. It has never been easier to take photos at public events. Yet it remains difficult to gather all the photos taken at them. To this end, the students created "That One Special Shot" (TOSS), an application which will facilitate the collection and distribution of photos. Using TOSS, users are able to take a photo at a specific event and upload it in real time to an online, crowd-sourced photo database. After the event, TOSS allows them to download the photos from the database for free.



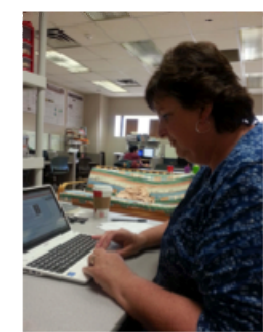
Elucidating the power and beauty of Graphs Graphs are all around us!



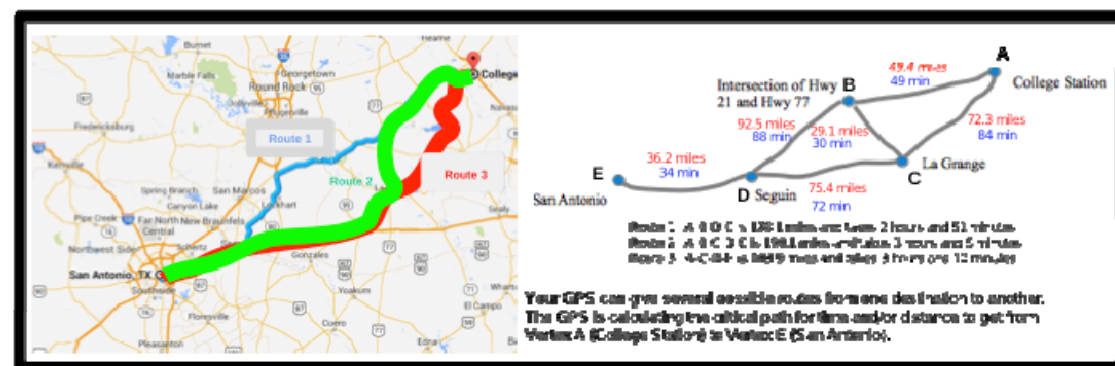
In the interest of increasing awareness of graph theory and its application, together with Tami Dudo and Sarah Kostroun, two Texas high school teachers, we explore topics and exercises which would introduce these topics into the secondary school mathematics curriculum. Texas curriculum identifies three courses as having mentioned concepts relevant to graph theory; Discrete Mathematics, Computer Science III, and Advanced Quantitative Reasoning. We have identified several common problems which are best visualized as graphs in the nature of vertices and edges, and therefore are a worthy topic for a problem solving strategy, not limited to the Computer Science.



Tami Dudo
A&M Consolidated High
Mathematics Teacher
College Station, Texas



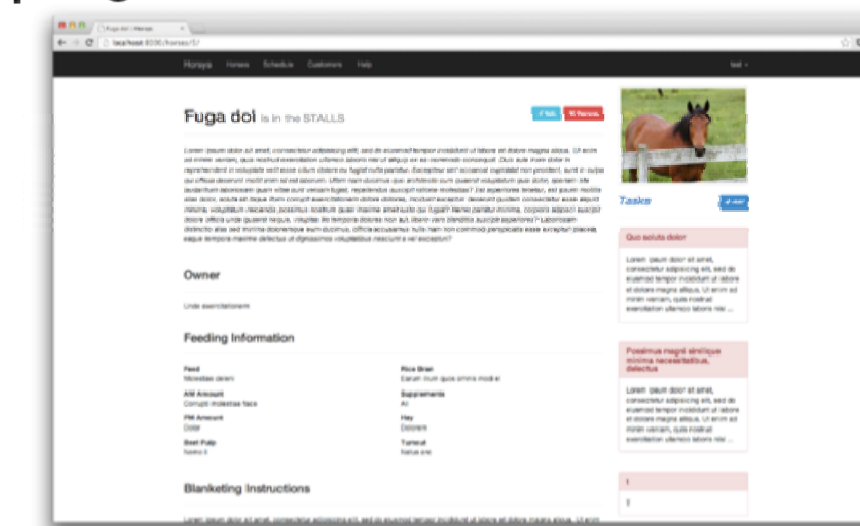
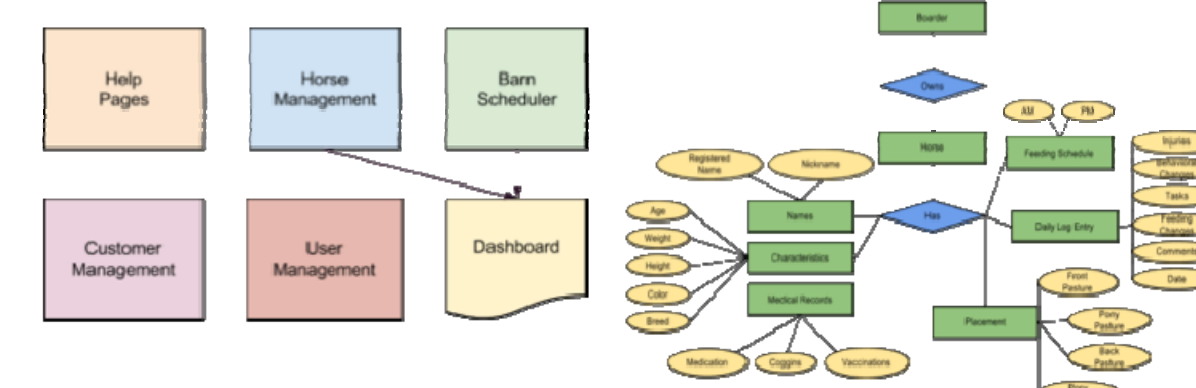
Sarah Kostroun
Midway ISD
Mathematics Teacher
Hewitt, Texas



Computing projects for the public good (CS482)



The Gallop Foundation is a non-profit organization in College Station that uses equine assisted learning and therapy to help a range of people. The **Riding for Hope** program utilizes hippotherapy to serve a range of mentally and physically disabled patients from Brazos Valley Rehab Center. The **RIDE** program targets under-served elementary/middle school children and teaches them to ride in an after school program.



A group of senior undergraduates (G. Listi, A. Taghavi, E. Fawcett, K. Wearden, J. Martinez) designed, implemented, and deployed an information system for managing barn stalls, horses, and volunteers; the project includes scheduling, cataloging, and general management. Loosely, it is a "facebook" for the horses used by the foundation.



The Lane's Challenge is a "triathlon" event benefiting the Brazos Valley Foodbank. The event involves running, cycling, and consuming fried chicken. It is informally organized and operates on a minimal budget. A few years ago, a participant was lost an hour into the race and emergency services were dispatched. The participant was later found, having diverted from the racecourse. A team of four students (B. Holt, M. Bass, M. Hickman, A. Siddiqui) developed and tested a tracking system, using mobile phones and the web to help ensure safety at subsequent events.

