Senior Projects

Department of Computer Science



May 2020



Blueberry Pancakes





Ingredients

cup milk
 tablespoons white vinegar
 cup flour

Whisk is an Android app that allows you to digitize your personal cookbooks. You can share your recipes with friends and family by creating groups and inviting members to join these groups. Whisk makes it easy to add new recipes, letting you enter the recipe or take a picture of a recipe card or cookbook page to import a recipe. Recipes can be searched by title, ingredient, or tag. When you are not sure what to make next, visit "Explore" to find some inspiration. Whisk offers advanced features, such as autogenerated recipe tags for easier searching and the ability to scale recipe ingredients on the fly.

Micaela Robosky, Noah Rosamilia, Ian Spryn, and Nathan Stoner

Tauros is an industrial robot monitoring system developed in collaboration with Advanced Construction Robotics. The Tauros software suite is designed to securely and reliably connect field technicians and software engineers to the TyBot construction robot. Field technicians use the Tauros iPhone application to monitor a robot's status, change its configuration, and update software versions. Software engineers can connect to the robot through the field technician's phone, accessing advanced diagnostic information.

Daniel Carns, David Corbin, and Mitchell Harvey





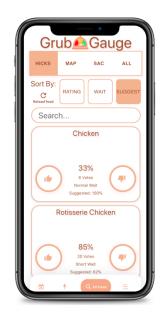
Giving Tree is a web application that connects nonprofit organizations with a wide range of potential donors.

Community foundations post the needs of nonprofits in their area as "giving opportunities" on Giving Tree, where they are visible to the public. Donors can search for a giving opportunity based on its cause, description, location, or nearness to reaching its goal. They can then read about, donate to, and track the status of giving opportunities that interest them.

Sarah Calvis, Nate Sprecher, Logan Stahl, and Miriam Tan

Grub Gauge is a web application crafted to enable students, faculty, and staff to enjoy the best possible dining experiences at Grove City College. Compatible with all browser-enabled devices, Grub Gauge allows users to discover meal options at each cafeteria, share opinions on food, and monitor the busyness of all cafeterias—all without having to leave the comfort of the dorm! Grub Gauge gives diners personalized recommendations and all the information they need to make informed decisions on their dining experiences.

Patrick Csaszar, Jacob McKinnis, Thomas Frick, and Joshua Weinland



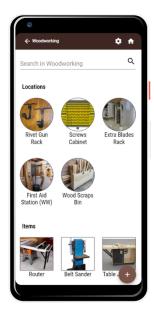


MODA Styles is an Android app that allows you to look up style advice, borrow clothing items from other users, and lend out your own clothing items. With our inapp style guides, you'll be able to see our expert style advice for almost any occasion. Find an item you want to borrow? Contact the owner of the item through our in-app messaging. You can discuss item details and figure out a plan for meeting up. Lending an item is easy. Simply upload a picture of your item, fill out the description, and wait for users to message you to borrow it.

Mark Brestensky, Sam Diehl, Ben Mumaw, and Danielle Smeltzer

Placewise is a mobile-first web application created for large engineering shops to help users locate parts and tools. This helps minimize misplacement costs. Users can search by location, category, and text. Each item has information and instructions on where to find it in the shop, and users can report problems to administrators. These administrators can customize categories and locations for their shop, create items, associate items with one category and many locations, and handle user reports.

Zachary Hughes, Peter Lowrance, Mitchell Smith, and Ethan Weaver





Presto is a flashcard-based study website, designed to make studying more effective via multimedia content and the spaced repetition technique. Presto provides custom study sessions, tailored to the user's learning needs and presented in a way to optimize memorization. Support for text, images, and audio accommodates a variety of learning styles. With Presto, users can study independently or share flashcards and study with classmates.

Sam Carlin, August Hall, Josh Risinger, and Emily Wasylenko

Computer Science Student Recognition Award

Presented by the Computer Science faculty in recognition of a graduating senior's academic achievements and service to the department and community

Logan Stahl will graduate *summa cum* laude with a Bachelor of Science in Computer Science and minors in Data Science, High Tech Entrepreneurship, and Mathematics. He has demonstrated an exceptional record of academic achievements, service to the department, and collegiality with faculty and his peers. His senior capstone project, Giving Tree, helps community



foundations secure donations from a broader audience, making it easy for people to find local giving opportunities that match their interests. Logan conducted research with Dr. Britton Wolfe about using computer vision to follow ants with a mobile robot, a task of interest to Dr. Steve Jenkins of the biology department.

Logan has assisted the computer science department on several occasions with recruiting events, serving as an exemplary student representative. He also served as Vice President and President of the student chapter of the Association for Computing Machinery (ACM). As President of the Adelphikos Fraternity, Logan worked to promote Christian brotherhood and campus unity through several campus events. In addition, he was an active member of the campus Prison Ministry club, routinely leading Bible studies with the men at Mercer County Jail. Logan is a member of Omicron Delta Kappa (ODK), a national leadership honor society, and Kappa Mu Epsilon (KME), a national mathematics honor society.

This past summer, Logan worked as a Software Development Intern at UPMC Enterprises in Pittsburgh, where he developed improvements for a clinical document API designed to service machine learning and artificial intelligence applications. Logan is pursuing opportunities in the mission field in Europe, helping to empower the church and evangelism through technological expertise.