CSC 521 Computer Science Capstone Project Presentations
Monday, December 12th, MH 206
9 am - 2:15 pm

Time	Presenter	Advisor	Title	Description
9:00	Jason Ash	Dr. Allan Brockenbrough	New England Mountain Minder	A web app providing a simple planning for an optimized day on the slopes: • Real-time Lift Status: Stay informed about opened or closed lifts. • Trail Updates: Keep track of trail conditions, maintenance, and night skiing availability. • Weather Insight: Get the latest weather information for each mountain. • Administration: Manages the dynamic mountain live map.
9:20	Jacob Bailes	Dr. Allan Brockenbrough	FitXpress	A fitness app where users calculate key body metrics, log exercises, and create weekly workout plans. It offers data visualization, enabling users to track their progress over time. Users can log workouts, save calculations, and monitor their fitness journey through interactive charts and graphs, making it easy to see improvements and set goals. This web app promotes better health management and supports personalized fitness tracking.
9:40	Travis Leite	Dr. Allan Brockenbrough	DogMeet	DogMeet is a web application designed to help dog owners connect with others and organize meetups at local dog parks. Users can add friends, send messages, receive event notifications, select their closest parks, and create or manage social events. They can also personalize their profiles by uploading a profile picture or pictures of their dogs. The platform includes administrative tools for managing user accounts, events, and park listings.
10:00	Thomas Urbanski	Dr. Allan Brockenbrough	The Lunaris Minecraft Modification	Portal Specifications: A unique portal constructed with Chiseled Stone Bricks, activated exclusively by utilizing the Moondial Item. Dimension Specifications: World Creation Specifications: The dimension features four distinct biomes: 1. Sleeping Sands: A desert-like biome adorned with pale white sands and boulders. 2. Lunar Forests: A lush forest biome boasting three diverse tree varieties. 3. "Unnamed Mountains": A rugged mountainous biome rich in ore deposits. 4. Azurite Oceans: An expansive ocean biome with deep blue waters.

10:20	Yogesh Acharya	Dr. Kaur	Garuda	Garuda is an advanced outdoor surveillance solution with cutting-edge machine-learning capabilities. It's a complete outdoor surveillance solution with facial recognition, package detection, and instant alerts.
10:40	Dan Rosen	Dr. Al-Haidari	SafeKeep	SafeKeep is a Personal Endpoint Security Application that offers virus scanning, URL analysis, firewall management, traffic analysis, and DoS prevention. The application will be built using Python, be multithreaded for efficiency, and will target the Windows platform. The application will have a graphical user interface (GUI) to allow easy management of its features and will store user preferences for customization. -Built using Python, utilizes tools such as ClamAV, VirusTotal API, and WHOIS for malware and phishing detection. -PyShark and Scapy for traffic analysis and DOS prevention
11:00	Dan Pullino	Dr. Allan Brockenbrough	CivicsClues	This project is a comprehensive platform for users to engage with national and local politics, providing access to information on local elected officials, party beliefs, upcoming elections, and an interactive electoral map for predictions. Users can also participate in discussions through a moderated forum. Registration is necessary, requiring users to provide email, password, username, and political affiliation. - Implement Google Civics API for website interaction - Gain hands-on experience with API integration from scratch - Work on backend development with databases (MongoDB or MySQL) - Learn user management: creating, promoting, and deleting users/admins - Enhance skills in backend practicality - Improve CSS styling techniques - Improve existing PHP knowledge - Explore user interactivity with electoral map
11:20	Nand Patel	Dr. Allan Brockenbrough	GeoConnect	GeoConnect is an innovative MERN stack application designed to connect users within a nearby radius. With location-based user discovery, it allows individuals to find others on an interactive map and start conversations effortlessly. The app features private profiles, real-time one-to-one messaging, and group chat options, making it ideal for fostering local connections. Whether for socializing, networking, or forming communities, GeoConnect bridges the gap between proximity and meaningful, engaging interactions.
11:40	Sandy Saint	Dr. Allan	Let's Sign up!	The goal of this project is to develop for the

	Fort	Brockenbrough		Computer Science Department at Salem State University to assist capstone project students in signing up for their oral presentations. A student will need to sign in using their SSU email and student ID, pick an available time slot, and provide their project details, including the title and description of their project and their project supervisor. The web application will also allow a student to edit and update their project sign-up details when needed.
12 - 1			Lunch	
1:00	Haddy Jatta	Dr. Kaur	Sima	Sima is a prototype of the next generation of driver assistance vehicles that showcases the improved functioning of available driver assistance technologies. Built using Python and computer vision algorithms on a SunFounder PiCar-X. Sima demonstrates capabilities in obstacle avoidance, line-following, and multiple-sensor integration. These features highlight how software and hardware work together to create reliable, autonomous functionalities, making it a strong foundation for future driver assistance systems.
1:20	Raul German Garcia	Dr. Allan Brockenbrough	BudgetGadget	Budget Gadget is a digital tool that empowers individuals to manage their finances effectively. From saving for future endeavors to maintaining day-to-day expenses, Budget Gadget offers a comprehensive set of features tailored to meet diverse financial needs. Key Features: Toolkit for Financial Management: Currency Converter: Easily comprehend the global value of your money by converting between different currencies effortlessly. Crypto Currency Converter: Stay updated on the dynamic world of cryptocurrencies by seamlessly converting between various digital currencies. Unit Converter: Simplify tasks like cooking, home improvement, or travel planning by converting measurements across different units. Monthly Statement: Get a comprehensive overview of finances, including income, expenses, and upcoming payments, conveniently presented in one place. Finance News Section: Stay in touch with the latest financial news relevant to your region, enabling informed decision-making about your finances.
1:40	Makenley Saint Cyr	Dr. Allan Brockenbrough	GameRaters	This WebApp is a platform for gamers, creating a community where users can express their opinions. This platform relies on Reviews made by users, allowing

				gamers to share their experiences. Users can engage with other users through comments and discussions on recommendations. Regarding the variety of games, this web application covers various game genres like Fighting, RPG, Adventure, etc. Users can contribute their ratings to shape the gaming community. They can also discover their new favorite games based on recommendations shared by the community. I also plan on making this easily navigated, making it easy for newcomers to engage.
2:00	Bridget Knight	Dr. Kaur	Plant Care Assistant	Understanding exactly what plants need can be challenging. Sproutling bridges this gap by combining hardware sensors with a mobile application to give clear insights into plant health. The system uses precision sensors and timers to measure vital signs that aren't easily detected by human senses, helping users make better care decisions. Connected to home WiFi, the Sproutling app lets users check their plants' status from anywhere in the house, turning plant care data into practical insights to develop a deeper understanding of their plants' needs.