**What is innovateAFITC?**

The Montgomery Area Chamber of Commerce – TechMGM in partnership with the Montgomery Armed Forces Communications and Electronics Association (AFCEA) –Chapter Education Foundation (EdF) and the United States Air Force (USAF) are proud to present innovateAFITC!

Being held in conjunction with the Air Force Information Technology and Cyberpower Conference (AFITC), innovateAFITC is a hackathon event where members of government, industry, and academia collaborate and network together to discuss the national problems we face today. Diverse, multi-skilled teams will compete by presenting solutions to Air Force and local government, senior leadership and key stakeholders. This competition aims to enables IT professionals from all IT backgrounds such as network communications, cyber security, software development, design, and STEM to quickly collaborate, form bonds of Wingmanship, and share skills and experience. By tapping into the talent across functional and organizational lines, residents of the community can leverage innovation and talent right in their backyard to make city and government work for the benefit of us all!

**Event Coordinators**

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| INSERT AU POC |  |  |
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**Partnerships**

The Montgomery AFCEA Chapter Education Foundation will be partnering with the Montgomery Area Chamber of Commerce (TechMGM) and the sponsors of AFITC (AU, PEO BES and SAF/A6) to make this event a success.

**Students:** As a student seeking a degree or receiving training in a STEM area this is an ideal opportunity to work alongside individuals doing cyber and IT work. Being a part of a collaborative team will allow you to demonstrate your skills and strengths all the while learning from others across diverse technical areas. This event will expose you to the different aspects, challenges and numerous innovative opportunities in cyber and IT career fields with a focus on AF mission areas.

**CyberPatriots:** CyberPatriot competitions focus on either hardening or penetrating an existing system. Such knowledge is crucial in building IT systems and networks from the ground up. Why not put that technical acumen to use in developing a new innovative idea? Cybersecurity professionals are in high demand and the knowledge and expertise you possess is pivotal at the start and throughout the lifecycle of a system. This event gives you the opportunity to test your mettle!

**USAF Military Members:** In the cyberspace realm of the USAF mission, professional development often requires the exploration of opportunities external to the organization. Such exploration and experimentation with varying technologies employed by industry is limited within a closed cyberspace environment. In contrast to the normal mission environment, this event will give you the opportunity to bring innovative ideas, develop those ideas using those technologies with a community of professionals, and present those ideas to USAF key leaders.

**Industry:** Whether you’re an integrator, developer, or manager you are in an ideal position to bring value added technology expertise to this event. The latest technology tools and solutions are brought to the USAF by industry. Industry IT professionals are essential to solving military problems through innovation. This event will give you an opportunity to bring your best of breed technology expertise to the forefront in solving a mission area problem for the Air Force.

**Goals and Objectives**

* Encourage collaboration amongst students, industry, airmen and government IT professionals
* Provide an opportunity for participants to utilize their technical skillsets and apply their expertise across AF mission areas in cybersecurity, network communications and software development
* Increase awareness and recruit for the AF’s Cyber patriot program
* Mentor students, CyberPatriots and airmen
* Enhance awareness of Smart City Smart Base and explore the technologies to support them
* Welcome newcomers and spark interest in cybersecurity, network communications, software development and design in support of AF mission areas
* Leverage industry expertise and innovative solutions to address AF and local government challenges
* Educate the River Region community on technical opportunities available locally and within the USAF
* Showcase a collaborative working environment for participants to make headway on problems they care about

**Considerations**

* Complement AFITC’s theme and agenda, not detract from AFITC, encourage maximum participation at keynotes and breakout sessions
* Close collaboration with the local community to provide workspace for the teams to collaborate and prepare for their presentations
* Maintain consistency in judging and evaluation of each team’s presentation
* Highlight potential talent for the USAF/supporting organizations to recruit for cyber careers

**Event Theme**

Smart City and Smart Base

**Event Narrative**

The cyberspace environment continues to increase in scope and complexity. Because of this growth, new problems arise in how to properly leverage and employ these new technologies, and these problems are only compounded with the world becoming more and more dependent on technology. City and government inefficiencies continue to multiply in tandem with society’s technological advances.

To address such inefficiencies, “Smart City” initiatives are all a buzz around the world to help enable city and community officials to interact directly with the community and city infrastructure to monitor what is happening in the city, assess how it is evolving, and how to enhance a better quality of life.

Earlier this year the 42nd Air Base Wing (ABW), which runs Maxwell Air Force Base (MAFB), began to test and better understand IoT implementations driving Smart City and Smart Base initiatives. Proof of concept examples include facial recognition and license plate scanning at entry points into MAFB, solar beam/geo-fencing technology to reinforce MAFB’s perimeter defenses on the riverside of the installation where a physical barrier is implausible, and remote monitoring of temperatures inside key buildings on the air base.

Government officials have been actively exploring a number of initiatives that will help the community emerge as a model “Smart Community” through public and private partnerships. These initiatives have the possibility to be replicated across the AF to multiple bases, cities and communities. Among some of the Smart Base solutions being developed at MAFB is perimeter security. A portion of MAFB along the river cannot be secured using a physical barrier, largely due to damage caused by periodic flooding. To address this issue, beam arrays were installed capable of detecting intrusions through the use of Infrared Technology. To address the flooding issue, the beam arrays are setup transportable and can be easily removed during high risk weather. MAFB leadership is also investigating the applicability of a facial recognition and license plate scanning capability, which would quickly detect individuals that are criminal in nature or a high risk to the installation.

From a communications perspective, MAFB is exploring the development of a Group Messaging Toolkit and public information kiosks for the base as well. The Group Messaging Toolkit would allow a variety of information to be distributed in a more timely and efficient manner and enable rapid communications, which would distribute emergency notifications to the surrounding community. The information kiosks would provide MAFB residents and visitors historical data about the installation and provide information on current events.

As you can see, “Smart City” initiatives are in full swing at both the local and national government levels, and collaboration with industry is crucial in this venture in order to leverage each other’s capabilities, maximize efficiencies, and work “smarter”. With the declaration of MAFB and the City of Montgomery as “Smart City” and “Smart Base” pilots, government officials have been actively exploring a number initiatives that will help the community emerge as a model “Smart Community” through public and private partnerships.

Be it creating mobile applications for public transportation, developing smart parking garages, leveraging unified cloud messaging systems, consolidating e-911 help centers, or developing innovative ways to promote awareness in the environment, the possibilities are boundless in the discovery and development of IT solutions that enable a better quality of life for a military base and the city or community it supports.

**Target Audience**

The target audience for participants is focused around members of the USAF in the local community and those that are geographically separated who are already planning to attend the conference, state and local government, industry, and academia whom are or working towards being practitioners of IT such as:

* Students (High School and College) in STEM
* CyberPatriots
* Robotics Participants
* Network Operators
* Software Developers
* Database Administrators
* Data Scientists
* IT Managers
* Designers
* Architects
* Security Professionals
* IT Enthusiasts

**Team Eligibility**

* 4-6 person teams, no more, no less
* Each team must consist of members’ representative of the following backgrounds:
  + 1 Student
  + 1 Military Member
  + 1 Industry Professional
* It is advantageous your team composition includes expertise within the network communications, cybersecurity, software development and design areas to effectively address all evaluated areas
* Participant matchmaking for participants without a starting team is available
* 15 teams MAX

This event aims to foster military organization comradery with industry partners and the educational community. In addition, industry, academia and military members are encouraged to serve in mentor, coaching and training roles as members of a team.

**Registration**

Teams can register online via (MACC-TBD) for $200 a team. Each team must detail which team members are meeting the required criteria. If you are looking for a team, visit the matchmaking link to be paired with other IT experts looking to form a team. Registration will close once 15 teams have successfully registered.

**Competition & Presentation**

Each team will identify a problem or challenge within an Air Force mission area and will create an innovative technical solution to that problem to present for a panel of judges. As the event draws near, information will be released to aid in the development of the solution as it relates to each of technical areas (cybersecurity, network communications, software development, design). The rubric detailing the criteria for each team’s presentation will be released in phases with the final phase occurring at the event kickoff at 4CDT on Sunday, 27 August at CoWerx46 on 46 Commerce St, Montgomery, AL 36109 and live streamed on (TBD). Each team will have 24hours to create and submit their presentation to the event organizers. USE STORIES FROM EVENT THEME SECTION TO HIGHLIGHT THE TECHNICAL BAR/CRITERIA.

In Round 1, the preliminary round, each team will have 6 minutes to present their problem and innovative solution to a panel of judges. The solution may be in the form of slides (PowerPoint) or a live demonstration. The judges will have 2 minutes to ask questions of the presenting team.

The top 3 selected from the preliminaries will move to the final round the following day.

**Workspace**

Beginning on Friday, 25 August at 4CDT there will be designated locations at the Renaissance Hotel and in downtown Montgomery, AL within walking distance where teams can collaborate to work on their presentations. High speed and reliable network access will be provided at all locations; some will be available 24/7.

**Venue Support**

The event will need support in the form of workspace and internet accessibility/bandwidth at and in the community surrounding the Renaissance Hotel for presentations/judging. Ideally the event coordinators would like 2 – 3 spaces designated at the Renaissance Hotel as co-spaces for the event.

Locations in the community surrounding the conference include CoWerx46, Troy University, MACC SBRC.

**Communications**

Registration will be hosted by the Montgomery Area Chamber of Commerce. Event organizers from all three supporting entities will communicate with participants using SLACK, the registration website, and other web-based tools as we progress towards the Event Kickoff.

**Schedule of Events**

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| --- | --- | --- |
| **Date/Time** | **Event** | **Details** |
| **25 Aug 17** | Onsite Workspace Opens | Opportunity for participants to engage with teams (if in town) in designated coworking space areas |
| **27 Aug 17 4PM** | Event Social  Event Start | Location TBD. Possible location is the Renaissance Hotel or CoWerx46. Will need Food/beverages & A/V. Remaining competition criteria will be announced, and the event clock will start. |
| **28 Aug 17 4PM** | Presentation Submission Deadline | Deliveries will go to an event email address. Presentations will be prepped by the event organizers prior to each presentation. |
| **28 Aug 17 5PM – 8PM** | Preliminary Round Presentation/Judging | Takes place in the MPAC at the Renaissance, after AFITC keynotes. Tables (possibly), A/V required. |
| **29 Aug 17**  **TBD** | Final Round  (Senior Leadership) | Takes place in the Starlight room at the Renaissance during a Brown Bag session. A/V may be required. |
| **30 Aug 17 8AM** | Winner Announcement & Presentation to AFITC Audience | Takes place in the MPAC at the Renaissance, during a keynote’s presentation. |

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| **August 2017** | | | | | | |
| ***Sunday*** | ***Monday*** | ***Tuesday*** | ***Wednesday*** | ***Thursday*** | ***Friday*** | ***Saturday*** |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|  |  |  |  |  | **@4PM**Cowrking space opens |  |
| 27 | 28 | 29 | 30 | 31 |  |  |
| **@4PM**  Event Kickoff and Social | AFITC | | |  |  |  |
| **@4PM**  Presentation Submission Deadline  **@5 - 8PM**  Preliminary Judging | **@TBD**  Top 3 Judging | **@TBD**  Winner Announcement & AFITC Presentation |