LOYOLA BLAKEFIELD CYBER SECURITY

WINTER 2023 NEWSLETTER

<u>Foreword</u>

LBCSI has been working hard these past few months, competing in the AFA's national competition CyberPatriot State and Semi-Final rounds, studying for CompTIA Net+, Sec+ and A+ certifications, and even developing their own competition, LBC2! Despite mid-term exams, a freezing winter, and ever-changing sports schedules, our Cyber Dons have been hard at work learning about the world of cybersecurity.

LBC2

LBCSI is proud to annually host LBC2, an entirely student run and produced Capture the Flag style Cyber Competition. This year, the event will be held on March 25th, 9:00 AM-3:00 PM, open to all students grades 8-12. If you are interested in joining, feel free to visit https://lbc2.org/.

Mission

LBC2 is a competition designed by students, for students. We strive to create content that both challenges our competitors while also teaching different cybersecurity skills and helping gain a better appreciation for the field. With multiple topics, such as an Image-Based round, a Capture-The-Flag (CTF) round, and an Internet of Things (IoT) challenge, we work to let competitors explore a wide range of computer science subjects. Our hope is that every competitor leaves Loyola Blakefield with a motivation to learn more about their interests in cybersecurity.

Features

Our leadership team at LBCSI has been working day-in and day-out to create challenges for LBC2. The day will begin with the Comtech image-based round, consisting of multiple challenges concerning the Linux Operating System. Competitors will learn to navigate the command line and input basic Linux commands. Next, the Capture the Flag (CTF) Round will confront competitors to learn about subjects such as Programming, Cryptography, Reverse Engineering, Network Analysis, and Web Exploitation. Each challenge will consist of a question and participants will be asked to procure an answer, or flag, from the clue. Finally, during the CTF Round, LBCSI is including an all-new IoT (Internet of Things) City Challenge. The IoT City consists of 6

separate Capture the Flag style challenges, with an IoT twist. Ranging in difficulty from Intro to Advanced, the challenges will test competitor's knowledge of both basic cybersecurity and IoT elements. If you have any questions concerning the content of the competition please visit the competition's website, https://lbc2.org/.

Sponsors

Organizing LBC2 is a monumental task, one that our Leadership Team cannot undertake alone. As such, we would like to extend our gratitude to all our sponsors for contributing their time and the funds that make this competition possible. A special thanks to CyberStronger, the Governor's Workforce Development Board, GS Consulting, Skyline Networks, Hartford Computer Group, Hartman Executive Advisors, the Edward St. John Foundation, Juniper Networks, and the Federal Business Council for their support. If you or someone you know is interested in contributing to LBC2, please reach out to Charlie Hale '23 (cmhale2023@loyolablakefield.org) or Teddy Marine '24 (ejmarine2024@loyolablakefield.org).

<u>Term Two Overview</u>

As the CyberPatriot season winds down, LBCSI is moving into a new curriculum. Students are now taking time to study for industry level certifications, practice for Capture the Flag challenges, and explore their cybersecurity interests on their own. In the world of certifications, we offer instruction to all LBCSI members on Networking + and A+ certifications, along with other CompTIA Certifications and product-specific certifications. Another large part of LBCSI's term two plans is CTF training. While many students opt to train through Carnegie Mellon's https://picoctf.com/, some members, such as James Keller '24, have decided to create their own challenges and training materials for the rest of the club to learn from. LBCSI is very happy with the trajectory our students are on, and will update you with their results and progress at the end of the year.

<u>Cyberpatriot Wrap-Up - State and Semi-Finals</u>

After a challenging CyberPatritot State and Semi-Final Round, the results are in! This year's Semi-Final Round featured new and difficult challenges such as Fedora Linux and an equal increase in the difficulty of returning challenges. Competitors were faced with multiple Windows images, multiple Linux images, a Cisco Networking Quiz and Simulation, along with the return of Boeing's Air Traffic Control Challenge and a Capture-the-Flag style challenge from last year's Semi-Final Round. The volume of images also posed another hurdle for each time: time management. With eight separate challenges to complete and only five active teammates, teams had to strategize and prioritize which challenges needed to be completed. Overall, our Dons placed extremely well. Out of 2062 total teams, Loyola continues to consistently place teams in the top 1%. Congratulations to all of our award-winning teams!

High School

First place in the state and 33rd overall was team Aurelius featuring: Anshul Chelapurath '23, Grace Brehm '23, Nick Jacob '23, Casey Nazelrod '25, Valerie Runge '23, Ben Scholtes '23.

Second in the state and 44th overall was team Charlie's Angels featuring: Charlie Hale '23, Teddy Marine '24, Jack Wachter '24, Dylan Keller '24, Aidan Sachs '24, Michael Litrenta '24.

Fourth place in the state and 23rd overall was team HS3 featuring: Brendan McLaughlin '23, Chris Coady '23, Andrew Hill '23, Owen Wroten '23, Noah Morraye '23, and Dimitri Kokkinakos '25.

Middle School

First place in the state was team Ratatoullie featuring: Nathan Porter '27, Landon DuBois '27, Nick Fought '27, Matthew Marana '27, Cole Rohrbach '27, Eli Blair '27.

Second place in the state was team Micro Dons featuring: Chris Bever '29, Patrick Counselman '29, Liam Yates '28, Grant Benegas '28, Finn Mitchell '28, Porter Nachtman '27.

Third place in the state was team Da Dons featuring: Will Mascari '29, Joey Acchonie '29, William Barker '29, Austin Pitarra '29, Cole Morgan '29, Jacob Braxton '29.

<u>Guest Speakers</u>

On January 24th, we were privileged to host Mr. Percy Moore, retired Marine Lt. Colonel and entrepreneur, Mr. Oliver Sadorra '99, Chief Growth Officer at Dark Wolf Solutions, and Mr. Brian Carroll.

The conversation began with a presentation on the history of Artificial Intelligence, its current uses, and the future of AI in our everyday lives by Mr. Oliver Sandorra. Then, Mr. Brian Carroll, who has spent a career in risk management for major companies across the United States, gave an in-depth analysis of how to approach a cybersecurity attack, the team who handles such attack, and solutions. Lastly, Mr. Percy Moore and others gave a unique perspective into broad problems faced by the United States everyday. Students were then able to ask questions to each guest and gain further insight into a wide-variety of everyday cybersecurity problems.

We have even more great speakers lined up for the year!

 Mr. Evan Dornbush (parent '26, '28, founder of Point3 Security) will be speaking to our Dons on February 22nd at 3:15 p.m. This informative presentation will be open for the entire Loyola Blakefield community to attend. Feel free to contact us if you have any questions about the event. More details will be released soon!

Colonel Reid J. Novotny (Commander 175th Cyberspace Operations Group) will be speaking to our Dons on March 7th at 3:15 p.m in Wheeler Lounge. The 175th Cyberspace Operations Group defends Air Force Networks and stops digital attacks under the United States Cyber Command Cyber Mission National Forces. Col. Novotny commands 400 Airmen who work as Title 10 Operators. This informative presentation

will be open for the entire Loyola Blakefield community to attend. Feel free to contact us if you have any questions about the event. More details will be released soon!

If you or anyone you know would have interest in speaking to and educating middle and high school cyber students, please please reach out to Charlie Hale '23 (cmhale2023@loyolablakefield.org) or Teddy Marine '24 (ejmarine2024@loyolablakefield.org).

Social Media Presentations

In this new year, our leadership team has been busy presenting social media awareness to students all across the state! Mr. Morrill, along with Charlie Hale '23 and James Keller '24 traveled back to Harford Day School, presenting to the 4th and 5th graders. Also, Mr. Morrill, along with Charlie Hale '23 and Ben Scholtes '23 visited St. Michael - St. Clement School, presenting to their 7th and 8th graders. We cannot wait to travel back! We would like to extend a special thank you to Ms. Kearney from Harford Day School and Mr. Paul Kristoff from St. Michael - St. Clement School.

Looking towards the future, our team will be heading to St. Casimir School, St. Joseph School - Fullerton, St. Augustine School, and Resurrection-Saint Paul School for social media presentations. We are also excited to announce that we will be traveling to St. Augustine School in April! We are always grateful for the opportunity to speak to such eager minds!

Estonia Wrap-Up

On October 26, five Loyola Blakefield Cyber Security Dons embarked on a once in a lifetime trip to Estonia. Jake '19, Anshul '23, Teddy '24, Jack '24, and Matt '19 fought through fierce competition and placed 5th out of 28 teams from the Nordic-Baltic Region. As a conclusion to LBCSI's trip to compete in the Cyber Battle of Estonia, Storia Studio produced an amazing video to sum up our students' accomplishments. Watch the video here!

<u>Thank you Sponsors</u>

Thank You to our sponsors on behalf of the entire LBCSI program. We would like to thank all of our partners who graciously invest their resources in LBCSI. We are grateful for your continued support and guidance over the past eleven years. We want to specifically thank our presenting partner: The Edward St. John Foundation, and cornerstone partners T. Rowe Price, and Point3. A special thank you goes out to the Edward St. John Foundation President, Ms. Sharon Akers. We appreciate the continued interest in the development of our cyber students, and we look forward to continuing our work with these sponsors in the future.

Thank you all for taking the time to read this year's Winter Newsletter! Our team has been working hard bringing new and exciting opportunities, and we are excited to show you what we have in store for the end of the school year.

We hope you are all doing well and staying healthy.

Thanks again,

Charlie Hale '23,

Teddy Marine '24

Mr. Stephen Morrill,

The entirety of Loyola Blakefield's Cyber Science Initiative