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#include <QString>
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#include "PhysicsMath.h"

class PhysicsPump: public Savable
{
private:
    float m_qMax, m_pMax;
    float m_speed;
    float m_strav;
    float m_on;
    float m_blocked;

public:
    float m_pIn;
    float m_zOut;

    bool m_cavity;

    PhysicsPump();

    // ----- Properties
    float speed();
    bool working();

    void process(float dt);
    void set_p_in(float p_in);

    // -----
    float q();
    float dP_filter();
    float p_in();
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    float p_out();
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public:
    float m_pIn;
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void setConfig(float qMax, float p_in, float p_out, float dx_val, float vibr_val, float t_pump_podsh_pole, float t_pump_podsh_work, float t_dvig_podsh_pole, float t_dvig_podsh_work);
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float qO;
float dP_filter();
float p_in();
float t_gidropyata();
float p_out();
float dx_val();
float vibr_val();
float t_pump_podsh_pole();
float t_pump_podsh_work();
float t_dvig_podsh_pole();
float t_dvig_podsh_work();
float current();
};
#endif
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"I don't know that much about cyber, but I do think that's the number one problem with mankind" – Warren Buffet

"Bank of America has no spending limits in place for its cyber security teams. The only place in the company that doesn't have a budget constraint is that area." Brian Moynihan, Bank of America Chairman and CEO

"J.P. Morgan is going to spend a half-billion dollars on security this year, and we still feel challenged," Andy Cadel, general counsel, IP and data protection for J.P. Morgan Chase

"The demand for the cybersecurity workforce is expected to rise to 6 million globally by 2019, with a projected shortfall of 1.5 million." – Rashesh Jethi, Director – Services Group at Cisco

"Training security staff is the number one investment priority for cybersecurity leaders." – 2017 SANS Incident Response Survey

"Brazil is at the epicenter of a global cybercrime wave. The country ranks second worldwide in online banking fraud and financial malware, and the problem is only getting worse." – Robert Muggah in Foreign Affairs

The Global Cyber Crime Threat

- **Data volume online continues to increase exponentially**
 - From 2016 to 2020 data volume is expected to increase 50x
- **Estimates of total cybercrime costs vary from including only data breach to including a broad range of crimes, such as ransomware, DoS, malware, MITM, phishing, etc.**
 - These costs estimates range from \$600billion to \$6 trillion.
- **In a sample of 19 countries, Data Breach alone cost \$ 334 billion over the past 12 months – 2018 Cost of Data Breach Study: Global Overview – IBM Security – July 2018**
- **To cope with this threat, 2016 global cybersecurity spending was \$81bn – Gartner IT Security**

Brazil – the Cyber Crime Threat

- Brazil is second only to China in terms of the countries that have seen the greatest financial impact from cyberattacks perpetrated in 2017 – Symantec
- In Brazil, data breach costs exceeded US\$14 billion over the past 12 months, compared to US\$ 76 billion in the US during the same period – 2018 Cost of Data Breach Study: Global Overview – IBM Security – July 2018
- Brazil has been ranked by Kaspersky Lab number #1 in the world for banking malware attacks.
- Just recently, in August 2018, Brazil has enacted the Data Protection Law (13.709/18)
 - Brazilian Central Bank has also issued a wide ranging series of cyber crime protection requirements for financial institutions (Res.# 4658/2018 – BACEN)

Breaking news recent cyber-attacks published in the media

- **Norsk Hydro disrupted by major cyber attack** - The attack began in the United States on Monday evening and escalated into Tuesday, hitting IT systems across most of the company's activities and forcing staff to issue updates via social media (20 March 2019).
- **The cyber-attack that sent an Alaskan community back in time** - In 2018, a remote Alaskan community's infrastructure was hit by a malware attack which forced it offline. It was only then they realized how much they depended on computers (9 Jan 2019).
- **Hackers use 200,000 insecure Brazilian routers to mine cryptocurrencies** - Hackers are using a network of vulnerable routers to spread crypto-mining malware to unsuspecting users, security researchers have discovered (3 Ago 2018).

It is common sense in the cyber industry that the majority of incidents are not disclosed nor even noted until it is too late and something chaotic happens .

Cybersecurity Insurance

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    float m_strav;
    float m_on;
    float m_blocked;
    float m_blocked;
    float qByP(float p);
    float m_pIn;
    float m_pOut;
    bool m_cavity;

    PhysicsPump();

    // ----- Properties
    float speed();
    bool working();

    void process(float dt);
    void set_p_in(float p_in);

    // -----
    float q();
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- Designed to mitigate losses from a variety of cyber incidents.
- Many companies are struggling to define their policies for this business, as there's still confusion about what they should cover and uncertainty on the extent of damage caused by a cyberattack.
- Insurers do not have enough actuarial data to adjust premiums based on what security controls and products are most effective.
- There is a lot of room for improvement, as companies improve their understanding about Cybersecurity and the risks associated to it.
- It seems that the only certain thing is that the risk will increase exponentially in the next years.

Cybersecurity Insurance Market Insights

- According to Richard A. Clarke, former cybersecurity special advisor to the U.S. Government, the insurance industry should work to grow and improve the understanding about Cybersecurity. Main insights are:
 - Know your Insureds' IT budget – level of investment is directly associated to level of risk.
 - Cybersecurity defense is about people – continuously trained IT people is what really makes the difference.
 - Know how secure your insureds are - continuously monitor the cybersecurity procedures.
 - Don't give up - Don't look at all the horror stories, we need to learn from the ones that aren't being hacked.

The Problem

- There is a major lack of trained cybersecurity professionals
- Global demand for cybersecurity professionals will increase to approximately 6 million by 2019 – Palo Alto Networks Research Center.
- In the US alone, the demand for cybersecurity professionals¹ exceeds 1 million, with 300,000 unfilled jobs – CyberSeek.org
 - By 2022, the US unfilled job gap will reach 1.8 million – Center for Cyber Safety and Education
- Based on a report on cybersecurity job openings in Latin America, we estimate that in Brazil, unfilled job positions currently exceed 60 thousand²

Note:

1 This includes workers in primary cybersecurity jobs – such as cybersecurity analysts – as well as workers in roles requiring cybersecurity-related skills and certifications

2 2017 Global Information Security Workforce Study from Center for Cyber Safety and Education

CE Cyber Value Proposition to the Insurance Industry

Partner to Create a Cybersecurity Insurance Program – multilevel set of certifications, programs, curriculum, testing and continuing education.

Formulate a unique state-of-the-art training program and certification, combining Cybersecurity capabilities with Hyper-realistic simulation training (key element to achieve actual readiness to attacks).

To train and develop a world-class cybersecurity workforce for the Brazilian market through the delivery of a suite of Cyber Security STET (Simulation, Training, Education and Testing) solutions



First Center of Excellence in Cybersecurity Training in Brazil



Hyper-realistic Simulation Solutions



Full development program for Cybersecurity professionals (incl. Certifications)



Training Hubs, Educational Partnerships and In-company Training



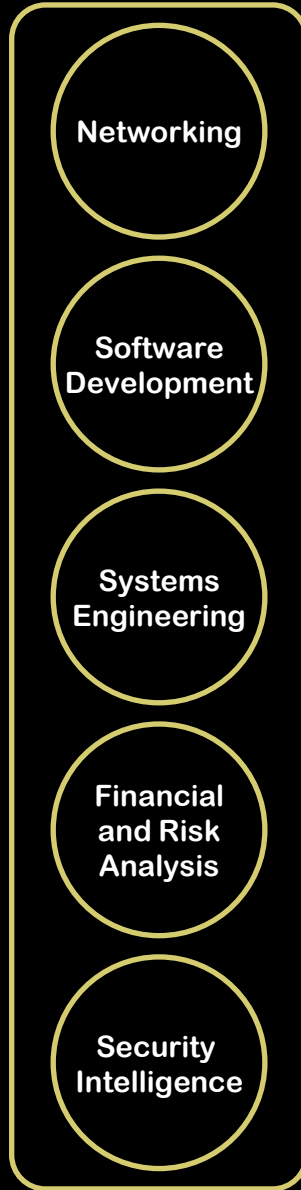
Exams and Testing Facilities



Sale of Cyberbit Ranges and other services/training/solutions.

We will provide customized suites of courses, created and used in Israel for education in cybersecurity, establishing a full Simulation, Training, Education and Testing (STET) cybersecurity platform

Common Cybersecurity Feeder Roles



Core Cybersecurity Roles



LEVERAGING LEADING CYBERSECURITY TECHNOLOGY FROM ISRAEL



The Israeli Defense Forces
Cyber Academy - Israel



CYBERBIT
PROTECTING A NEW DIMENSION



"Israel – the world's second largest exporter of cybersecurity technology – leads employer demand for talent in our field.."

– Cybersecurity Jobs Report 2018-2021 by
Hervajac Group

- CECyber has exclusive rights to the Cyberbit Range in Brazil
 - Cyberbit Range is the "cornerstone" of our STET platform
 - Cyberbit is the cybersecurity subsidiary of Elbit, Israel's largest defense contractor
-
- CECyber has established contacts with top Israeli companies to provide a wide-range of world-class education/training products
 - Moreover, we will continuously add the best and latest training programs and platforms

Cyberbit Range: the Flight Simulator for Cybersecurity training

Main Capabilities

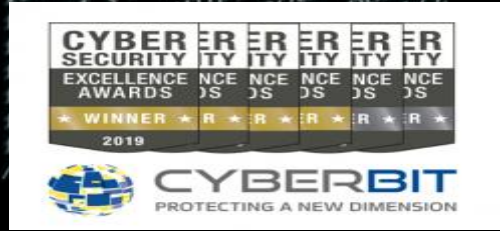
- Emulate SOC environment
- Simulate hyper-realistic scenarios
- Broad catalog of training scenarios
- Create own networks and scenarios
- Advanced simulation management system

Business Value

- Keep security teams skilled and up to date
- Test the real impact of security controls
- Measure and assess procedures in real-life scenarios
- Assess and onboard new hires and develop individual skills
- Verify the effectiveness of security technologies in real-life settings



Cyberbit Awards & Success Stories



Cyberbit Range Customers

A collection of logos for Cyberbit Range customers, including IABG, ISE SYSTEMS, A1, ARIEL UNIVERSITY, Baltimore Cyber Range, Purple Synapz, and REGENT UNIVERSITY. There are three dots at the bottom right of the section.



Trainee briefing on upcoming mission


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    void process(float dt);
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