

Year 3 - Market Validation Stage Projects

AngelPass

Birmingham City University

If you die today, what happens to your passwords?

We put you in control of your passwords after your death

For you, your family or business

By using novel secure technologies

Because both those who stay and those who leave need to be prepared.

TAPCHA

Bournemouth University

TAPCHA: Online Fraud Detection and Prevention, Reinvented for Everyone

We improve the detection and prevention of non-authentic web traffic for global online service providers, by offering a new, localisable, non-invasive CAPTCHA solution because business revenue and user trust are adversely affected by the increasing amount of malicious online transactions.

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CTLR
Bournemouth University
Cyber Threat Landscape Ruleset: A cost-effective correlation ruleset for advanced threat detection
<p>We offer advanced and cost-effective threat detection for security service providers, smaller or larger companies by offering a standalone subscription-based service for correlation rules because threat detection tools without proper rules is a waste of resources.</p>

PITCH
Bournemouth University
Privacy Risk in Context
<p>We provide a context-aware privacy risk assessment tool clients that provides them with an overview of their privacy risk exposure. This allows them to confidently identify and embed appropriate security measures to reduce that risk, because our clients are serious about safeguarding their customers' privacy .</p>

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GuardKeeper
Coventry University
GuardKeeper: Creating secure connectivity and authentication of a consumer to an end user
We provide secure connectivity and authentication on the internet for a consumer by extending the green padlock security in the web browser with enhanced additional security because the green padlock doesn't indicate to the end user the identity of who they are connected with.

INSURE
De Montfort University
Secure Wi-Fi access wherever you go
<p>Did you pack your cyber security system last time you went on a business trip?</p> <p>Cyber security in public Wi-Fi networks is frequently non-existent. Yet, only 17% of business travellers report using VPN to access work related files and services, and existing Wireless Intrusion Prevention Systems (WIPS) only provide centralised security at a fixed location.</p> <p>INSURE has developed a portable WIPS that offers business travellers unsupervised, dynamic and adaptive real-time protection when connecting to public Wi-Fi networks.</p> <p>The unique statistical detection engine at the core of INSURE has been designed by academics at De Montfort University, one of the UK's leading university for cyber security research.</p> <p>We are looking for industry partners that would help us extending the evaluation of INSURE in a real environment</p>

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360HR Cyber Health

Goldsmiths

Leverage your company communications to track changing employee motivations

Our software spots hidden transformations in employee behaviour by identifying subtle changes in linguistic communications across multiple channels (Email, Slack, Mimecast etc.) that reflect motivation because people's goals change".

BLEMAP

Royal Holloway

BLEMAP: We analyse and mitigate security threats of Bluetooth devices.

We secure bluetooth devices for IoT manufacturers by automatically analysing the application and device firmware, and producing patches for them because the complexity of Bluetooth is resulting in an increasing number of threats that can affect IoT and other Bluetooth-enabled devices.

Seclea

Royal Holloway

Making Machine Learning Secure and Explainable

We make Machine Learning algorithms secure and explainable for stakeholders that develop and deploy Machine Learning based solutions by integrating our novel Model Provenance (MP) because insight into the inner workings of Machine Learning is essential for robust deployment safeguarding business operations and ensuring compliance.

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Prinesec

Royal Holloway

Shifting security paradigm from siloed-events to holistic-impact assessments

We enhance the information security resilience of organisations by utilising our patented technology that shifts the focus from siloed analysis of events to collective impact assessments because the existing paradigm of security control centres is insufficient. We aim to reduce the time to identify and contain a breach, which translates into significant savings for an organisation.

Risk2IoT@Home

Teeside University

e-Guard to empower and protect smart home and SMEs

We secure cyberspace for Smart Homes and SMEs by providing an intelligent risk detection and protection scheme, empowering through AI enabled personalised training and enforcing security policy for IoT devices.

Cyberscape Training

University of Brighton

Escaping boredom in Security Awareness Training

We provide immersive Security Awareness Training for enterprises by creating fun and effective educational Escape Room experiences because employees who are bored and distracted by tedious compliance training are a big security risk.

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PriSAT

University of Glasgow

Privacy Engineering for Software Designers: GDPR compliance requires strong consideration of privacy-by-design.

We enable software designers to design technology that complies with privacy regulations

For companies that build technologies which depend on personal data

By automatically co-evolving design artefacts to reveal privacy risks and recommend design alternatives

Because lack of privacy-by-design in technology increases risks of regulatory fines, reputation damage to brand and can become a barrier to technology adoption.

BioGenerate

University of Gloucestershire

Generating true random numbers from the body's physiological signals.

We generate True Random Numbers for SSL/TLS companies by using the body's physiological signals because they provide device independent, high rate, low-cost entropy as a standalone or complementary solution in random number generation. A disruptive evolution from Pseudo Random Number Generation (PRNG) to Quantum Random Number Generation (QRNG), now we bring you Bio Random Number Generation (BRNG). For when quantum is just not random enough.

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Verifiable Credentials

University of Kent

Verifiable Credentials: On the Internet, everybody knows it's a dog

We provide the virtual equivalent of physical credentials (plastic cards, passports, qualifications, driving licenses etc.) for everyone and everything by converting them into cryptographically secure and privacy protecting W3C Verifiable Credentials so that they can be easily stored, carried and presented electronically as needed.

PhishAR

University of Oxford

"PhishAR: your employees' augmented reality vaccine against cyber attacks."

WE increase resistance to phishing and other social cyber-attacks
FOR your non-expert employees
BY using immersive augmented reality capabilities of mobile devices
BECAUSE existing security awareness trainings lack engagement and interactivity.

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CRAB

University of Plymouth

Are you ready for IMO cybersecurity regulation? CRAB is.

We are providing an enhanced cyber risk assessment using artificial intelligence. That would primarily focus on transforming shipping sector and secondary insurance companies and governments, to a clever cyber-safe ecosystem by reducing and predicting it against future cyber-attacks. Last year's two large shipping companies (Maersk and Cosco) being victims of cyber-attacks with massive losses, which demonstrates the nearly zero protection existing in the maritime sector, a vital sector for UK trade, as it is carrying 95% of it. Furthermore, by the 1st of January 2021, all vessels must comply with the IMO regulations and install cyber defence mechanisms on board which makes our product invaluable and pioneering on protecting shipping companies from cyber pirates and GDPR fines. By installing a box on board the vessels, we will be able to scan systems and find vulnerabilities, utilising crew monitoring along with advance analytics, enhanced vulnerability database with feed coming from shodan and deep/dark web as well as artificial intelligence. The proposed investment will achieve an overall 400% ROI for investors first year after its launch.

CyRysk: ISO-Standard Automated Risk Assessment for IT Systems

University of Southampton

CyRysk: ISO-Standard Automated Risk Assessment for IT Systems

We make risk analysis of complex IT systems faster and more reliable for cyber security consultancies and large companies by providing a software solution that models socio-technical systems (including IT components, people and physical spaces) and automates an ISO 27005 risk assessment over them using a built-in knowledgebase of threats and countermeasures. This is vital because right now risk analysis is generally done on a whiteboard and is therefore time-consuming and error-prone.

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VACCYNE
University of Wolverhampton
Intelligent child-centred shield against harmful content and communications
<p>Did you know that 1 in 4 children are being exposed to racist or hate messages online? The Internet is an enabler for cyber victimisation including radicalisation, bullying, stalking and grooming. We provide parents and schools with a highly automated safeguarding solution to maintain good parenting against harmful communications. We deploy a “prevent” strategy incorporating machine learning-powered detection, automated real-time intervention and age-sensitive gamification techniques to train and raise awareness. Our solution has an intelligent virtual assistant to block the bad and promote virtue.</p>