SHERFOX LABS

DIGITAL FORENSICS • DIGITAL EXPLOITATION • DIGITAL INTELLIGENCE

INVESTIGATIONS • TRAINING • RESEARCH • TOOLS

PROSPECTUS 2026-27

Part of University of Southampton's
NCSC Academic Centre of Excellence in Cyber Security

A LETTER FROM THE LAB LEAD

When commercial tools stop, we get the data.

Dear reader,

Thank you for picking this up. SherFox Labs is the University of Southampton's operational digital forensics laboratory. We exist to do the casework, training, and research the wider digital forensics community need, and to build the kit when the commercial market doesn't.

What makes the lab unusual is who is in it. Most of the team hold day jobs in active practice — live casework, expert-witness instructions, clinical work, legal-sector work. They bring real, current operational problems into the lab. Academics teach and research alongside them. That mix keeps our hands in real cases, every week.

If you've turned to this document, you're probably weighing up an instruction, a partnership, a course, or a bid. The pages that follow are organised so you can find what you need quickly: who we are, the ways you can work with us, our investigative capability, courses, research and tools, and the work we do beyond casework.

If something here looks close to a problem you're carrying, please get in touch. The first conversation is always free.

Yours,

Sarah

Prof. Sarah Morris
FOUNDER & LAB LEAD · CHURCHILL FELLOW

"If we needed it & it didn't exist, we built it."

WHAT'S INSIDE · SIX SECTIONS

What's inside.

Six sections. Operational casework, fifteen courses, a fictional city, and every way you can work with us.

01

Who We Are

Twenty-seven people. Day-job practitioners plus academics. Inside the UK's largest CS school.

PAGES 04 → 09 →

02

Ways To Work With Us

Eight engagement routes from casework to bid collaboration. One email starts any of them.

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03

Investigations

Operational forensics + expert witness. CPR-compliant. Specialists in the unusual.

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04

CPD Training

Fifteen practitioner-led courses, set inside Cyberly. First-principles, hands-on throughout.

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05

Research & Tools

Casework-led research. Eight home-built tools — software and hardware.

PAGES 27 → 30 →

06

Beyond Casework

Mental health. Outreach. Students. Bids.

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SECTION ONE

WHO WE ARE.

01

A digital forensics laboratory at the University of Southampton. Twenty-seven people with two hundred and fifty combined years of expertise, one purpose-built fictional investigation universe, and a touch of cheese.

05 The Lab & The Team

06 Our Facilities

07 Inside ECS · Where We Sit

08 Cyberly · Our Investigation Universe

09 How We Work

ABOUT

The lab.

UNIVERSITY OF SOUTHAMPTON · SCHOOL OF ECS

Founded in 2022 by Prof. Sarah Morris. SherFox sits inside the School of Electronics and Computer Science (ECS) at the University of Southampton — one of the UK's leading centres for cyber security and digital forensics teaching and research.

27	250+	15	20+	100%
ON THE T	YEARS CO	CPD COURSES	TEACHING AWARDS	CASEWORK-DRIVEN

WHERE OUR PEOPLE COME FROM

Academically led, operationally grounded. Most of the team hold day jobs and contribute to SherFox alongside them. That mix is the point.

Practitioners
Active casework across multiple agencies

Healthcare
NHS clinical, info governance, forensic MH

Legal sector
Solicitors, paralegals, expert-witness work

Academic
Professors, PhDs, postdocs, Churchill Fellow

SECTORS WE WORK ACROSS

We are instructed across the full range of UK digital-evidence work. Criminal, civil, family, regulatory, and commercial.

Criminal
Police, NCA, defence-instructed.

Civil & family
CPR Part 35 reports, SJE, peer review.

Commercial & insider
Corporate breach, insider matters.

Regulatory & public
Tribunals, public-interest enquiries.

WHY THE LAB IS SHAPED THIS WAY

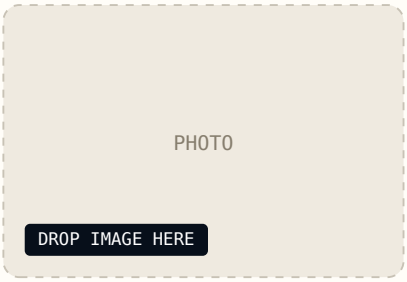
Operational casework feeds our research, and our research strengthens the operational community we serve. The day-job shape keeps our feet in real cases. The university shape gives us the time, infrastructure, and adjacent expertise to do the science properly.

OUR FACILITIES

Three spaces.

OPERATIONAL · RESEARCH · SCENE

Three purpose-fitted environments inside the lab. Same evidential standard throughout — wider access controls as you move from operational casework, to research, to scene simulation.



OPERATIONAL · CONTROLLED ACCESS

Operational investigation lab

Live casework runs here. Evidential bench, write-blockers, imagers, hash verification, sealed storage. Standard operating procedures throughout. This is where instructions land and where exhibits sit under chain of custody.

RESEARCH · SAME SPEC, WIDER ACCESS

Research lab

Same specification as the operational lab — wider, still-secured access for collaborators and supervised research. Where method validation happens. Where students under NDA work alongside the team.

TRAINING · RESEARCH · SIMULATION

Scene room with IoT connectivity

A physical scene room dressed and instrumented with connected IoT devices. Used for training, scene-response research, and simulation. Realistic technical challenge without exposure to real distressing material.

WHAT YOU CAN BRING

If you have an awkward device — broken, modified, vintage, undocumented, locked, or just weird — bring it. The combination of these three spaces, our kit, and the team is what lets us take on work most others have to turn down.

INSIDE ECS

Where we sit.

SCHOOL OF ELECTRONICS & COMPUTER SCIENCE

SherFox sits inside the School of Electronics and Computer Science (ECS) at the University of Southampton — one of the world's largest schools of its kind. Around 250 staff, 40+ degree programmes, 2,500 students. When you engage SherFox, you also have a foot in the door of the wider ECS.

Founded 1947
Nearly eight decades of growth. UK's first Regius Professor of Computer Science awarded 2013.

Research excellence
Computer Science research rated 100% world-leading for impact in the most recent REF review.

Accredited
BCS, IET, and NCSC ACE Cyber Security Education accreditations. Athena SWAN Silver.

DF-ADJACENT RESEARCH THEMES

Cyber Security
Hardware to critical infrastructure.

Vision, Learning & Control
Machine learning, computer vision.

Web Science Institute
Society and the web.

IoT & Pervasive Systems
Sensors, ML, applications.

Digital Health & Biomed
Sensors, meditech, decision systems.

Centre for Robotics
Perception, control, interaction.

OUR SIBLINGS · ECS ENTERPRISES

ECS Partners Ltd
Consultancy company we contract through.

Future Worlds
On-campus tech startup accelerator.

IT Innovation
Applied research, operational systems for industry.

Southampton RSG
Research Software Engineers, full-stack delivery.

Tony Davies HV Lab
High-voltage research and commercial testing.

Cyber Cluster
Chip security, DF, AI, blockchain alliance.

SPONSOR A FACILITY

Equipment, upgrades, student access, named lab spaces. Many ECS facilities welcome external sponsorship — extending capability for the wider research community, including SherFox's IoT scene room and the home-built tooling listed in Section 5.

THE FICTIONAL INVESTIGATION UNIVERSE

Cyberly World.

EVERY BYTE HAS A STORY · CYBERLYHQ.COM

Cyberly is the purpose-built fictional investigation universe we use to teach and run research. Every case is drawn from real practitioner experience — same artefacts, same evidential challenges — but with the names changed, the victims fictional, and operational conflicts avoided entirely.

We've been teaching this way for over eighteen years. At Southampton we took it further — rather than one-off case scenarios, we built an entire ecosystem that keeps evolving.

WHY IT MATTERS

Skill development without unnecessary exposure to real distressing material. Rigour without the human cost.

FOR PARTNERS

Research-grade sandbox and testbed. Synthetic data, real rigour, no exposure cost. Available under collaboration agreements.

FOR YOUR TEAM

Trauma-informed training built around realistic technical challenge. Used across our 15 CPD courses.

EXPLORE

Cyberly is continuously expanding and lives at cyberlyhq.com. The full ecosystem — factions, locations, datasets, and how it's used inside our courses — is detailed in Section 4. To use Cyberly's data or scenarios in partner research, see Section 6.

HOW WE WORK

The basics.

CONTRACTING · GOVERNANCE · ETHICS

How we take instructions, how we're governed, and what you can expect as standard. The same answers we give in every initial conversation, written down.

WHAT YOU CAN EXPECT

Free initial conversation
No commitment. Confirm fit, conflicts, what good looks like.

CPR-compliant reports
Civil, criminal, family, tribunal. Prepared to CPR Part 35 / CrimPR Part 19.

Chain of custody
Documented from receipt or scene lift. Auditable throughout.

NDAs as standard
Happy to sign at first contact. Corporate email preferred.

Trauma-aware delivery
Built into how we work, with your team and with ours.

GOVERNANCE & STANDARDS

Contracted via ECS Partners
University consultancy company. Track record from SMEs to FTSE 100.

University ethics
All research and complex casework runs through Southampton's ethics process.

Operational independence
Independent expert work declared and managed for conflict of interest.

Data handling
Secure infrastructure inside the University. Encrypted at rest and in transit.

Insurance
University-backed indemnity. Details on request.

HOW TO START

One email to hello@sherfoxlabs.com. Describe the problem in your own words; we'll confirm fit, run conflicts, and propose the right shape of engagement. Initial consultation no-charge, no-commitment.

SECTION TWO

WAYS TO WORK WITH US.

02

Eight ways in. Pick one, pick several, or describe the problem in your own words and we'll work out the right form together.

11 The Menu · Eight Ways In

12 Snapshots & Voices

13 Start The Conversation

THE ENGAGEMENT MENU

Eight ways in.

PICK ONE · OR SEVERAL · EMAIL OPENS EVERY DOOR

Most enquiries fit one of these eight engagement types. Pick whichever sounds closest and we'll help you shape it. All routes start the same way — an email. Pricing on request.

Investigations & Casework 01

Operational digital forensics across the spectrum. Specialists in the unusual, equipped for the everyday.

→ SECTION 03 · EMAIL WITH BRIEF SCOPE

Expert Witness Work 02

Independent expert, SJE, peer review of opposing reports, pre-action technical advice. CPR-compliant as standard.

→ SECTION 03 · INSTRUCTIONS VIA SOLICITOR

CPD Training 03

Fifteen practitioner-led courses, set inside Cyberly. Individual, bulk, dedicated, or virtual. Bursaries

→ SECTION 04 · EMAIL FOR BOOKING

Consultancy & Advisory 04

Technical advisory, methodology review, capability building, trauma-informed practice for your

→ EMAIL WITH PROBLEM STATEMENT

Bid & Project Collab 05

Letter of support, project partner, Co-I, or advisory board seat. Works both ways. KTPs, Prosperity, CDTs,

→ SECTION 06 · EMAIL FUNDER, CALL, DEADLINE

Student Projects 06

3rd-year, MSc, group MSc, doctoral via CDTs, or short Innovation Projects supervised by SherFox.

→ SECTION 06 · EMAIL A PARAGRAPH BRIEF

Outreach, Talks & Media 07

School visits, conference talks, public lectures, charity work, media. Often goodwill for public-interest purpose.

→ SECTION 06 · EMAIL WITH THE ASK

Hosted Researchers 08

Visiting researchers, sabbatical fellows, seconded practitioners. Short or long stays. Bring problems.

→ EMAIL OUTLINING PROPOSED STAY

NOT SURE WHICH ONE?

Email hello@sherfoxlabs.com and describe the problem in your own words. We'll help you find the right shape. Corporate email preferred — please don't send live case data on first contact.

EVIDENCE

Snapshots + voices.

All case details are anonymised. Specific identifying information is omitted by design. The examples below show the kind of problem we get asked to solve.

CASE SNAPSHOTS

Unusual Device Recovery

CASE

CHALLENGE
Modified embedded device, no commercial tool support, strict evidential continuity.

APPROACH
First-principles analysis with our SpectrumAcquire tool. Extraction documented to court-ready standard.

Vehicle Data Investigation

CASE

CHALLENGE
Damaged vehicle. Infotainment + telematics + multiple sources to correlate.

APPROACH
Infotainment forensics, telematics decoding, OSINT correlation. Defensible timeline. Expert witness report supplied.

Corporate Insider Matter

CASE

CHALLENGE
Large corporate. Sensitive internal review. Minimal footprint required.

APPROACH
SCOUT for semi-automated triage, ReviewBox for non-technical review. Discreet. Defensible. On deadline.

Peer Review

CASE

CHALLENGE
Defence team instructed us to test an opposing expert's technical claims.

APPROACH
Structured critique. Method gaps and unsupported inferences identified. Sealed-instruction. No onward expert role.

VOICES FROM THE DEN

> *Genuinely hands-on from the start. You work from first principles — understanding why things work, not just which buttons to press. I came away capable of tackling things I'd have avoided before.*

CPD COURSE PARTICIPANT · LAW ENFORCEMENT

> *Fast turnaround, but what stood out was the clarity. Every conclusion was easy to follow and justify. It never felt like a black box.*

CASEWORK CLIENT · LEGAL TEAM

GET IN TOUCH · ONE EMAIL OPENS EVERY DOOR

Start the conversation.

Investigations. Expert witness. Training. Consultancy. Bids. Students. Outreach. Hosted researchers. Or "we have a weird device and we don't know what to do." Wherever you're starting, please get in touch.

EMAIL · PRIMARY CONTACT

hello@sherfoxlabs.com

this is the one.

OTHER CHANNELS

PHONE	**+44 (0) 23 8059 3441**
LINKEDIN	**linkedin.com/company/sherfox-labs**
MAIN SITE	**sherfoxlabs.com**
CYBERLY	**cyberlyhq.com**
POSTAL	**ECS Partners Ltd · Univ. Road, Southampton SO17 1BJ**

OUR HOURS

Inbox monitored 10:00–16:00 UK Mon–Fri. Urgent? Add "URGENT" to your subject line.

ON SECURITY

Don't send live case data on first contact. We'll arrange a secure channel.

SECTION THREE

INVESTIGATIONS & EXPERT WITNESS.

03

Operational digital forensics across multiple jurisdictions, a range of agencies, and a range of remit. Criminal, civil, and private. Scene work, devices, comms, recovery, enhancement, expert reports, peer review.

15 Where We've Worked

16 Get The Data — Capability

17 Get The Data — How It Runs

18 Understand The Data

19 Present The Data

20 Solve The Unsolvable

21 How We Deliver

22 What It Costs

OPERATIONAL REACH

Where we've worked.

MULTIPLE JURISDICTIONS · RANGE OF AGENCIES · CRIMINAL, CIVIL, PRIVATE

Specialist digital forensic support across a wide spectrum of investigation. We have worked across the world — local UK, national, international, and cross-border. With law enforcement, regulators, government, corporate clients, legal teams, charities, academic partners, and individuals. The team combines computer science, law, and electronics, so we understand both the technical detail of digital evidence AND the legal, ethical, and operational contexts in which it has to be handled.

Jurisdictions

Local UK, national, international. Cross-border instructions handled with the legal and contracting framework to match.

Agencies & sectors

Law enforcement, regulators, government, corporate, legal teams, charities, academic partners, individuals.

Remit

Criminal, civil, family, tribunal, regulatory, internal investigations, advisory, peer review, pre-action.

SCENES WE'VE WORKED

Criminal scenes alongside law enforcement. Civil and corporate scenes for legal teams and businesses. Private scenes for individual clients and family matters. Site visits where evidence can't come to us.

WHAT "THE UNUSUAL" MEANS

Where mainstream commercial tools stop and the case still needs answers — that's where we get called. Modified devices, undocumented hardware, vehicle systems, IoT scenes, legacy media, deliberate damage.

if it plugs in, we'll find a way

CAPABILITY · THEME ONE OF FOUR

Get the data.

Acquisition is where most cases live or die. Mobile, computer, vehicle, IoT, cloud, comms, embedded, and the awkward one nobody else has tried. Standard tools when they work, custom approaches when they don't. Chain of custody intact throughout.

Mobile, wearable, IoT

Smartphones across OSes and generations, wearables, fitness devices, connected appliances, home assistants. Logical and physical acquisitions through to chip-off, JTAG, and ISP where required.

iOS · Android | Chip-off · JTAG · ISP | Wearables

Computer & server

Laptops, workstations, servers, removable media, RAID, virtual environments. Live, dead, triage. Including evidence-preserving captures of running systems and volatile memory.

Live · Dead · Triage | RAID · Virtual | Memory

Vehicle, maritime, drone

Infotainment, telematics, ECUs, drones, marine systems. Including modules without published specs, where reverse engineering is part of the brief.

Infotainment | Telematics | Drone

Cloud, remote, comms

Cloud accounts, encrypted services, remote acquisition with proper authority. CDRs, telecoms data, messaging, VoIP, and modern app communications.

Cloud · Remote | CDRs | Encrypted comms

Acquired the "unacquirable"

Cases where the vendor said it couldn't be done. Bespoke acquisition rigs, custom firmware approaches, lift-and-shift to a controlled environment.

Custom rigs | Firmware | Reverse engineering

Damaged, legacy, electronics

Failing drives, obsolete formats, vintage hardware, modified or damaged devices. Soldering bench, logic analysers, microscopes, and patience.

Damaged media | Legacy | Hardware bench

CAPABILITY · THEME ONE · HOW IT RUNS

How we get it.

Acquisition needs three things: the right kit, the right method, and the discipline to do it the same way every time. Here's what that looks like in practice.

AWKWARD BRIEFS WE SAY YES TO

Damaged or modified
Devices that have been physically tampered with, soldered, or partially destroyed.

Undocumented hardware
Vendor-specific, custom, vintage, or proprietary kit with no public extraction route.

Locked & encrypted
Where every commercial route has been tried and the data still won't come out.

Cross-source correlation
Multiple devices, sources, jurisdictions to reconcile into a single defensible timeline.

Second opinion
Sealed-instruction technical critique of an opposing expert's methodology and findings.

HOW A PIECE OF WORK RUNS

01 **Scope call**
No commitment, no charge. Confirm fit, conflicts, success criteria.

02 **Quote**
Fixed-fee where scope allows, day-rate where it doesn't.

03 **Receipt of evidence**
Chain of custody documented from receipt or scene lift.

04 **Acquisition**
Methodology selected, documented, peer-checked, hashed, verified.

05 **Handover**
Verified image plus a short technical report describing exactly what was done.

WAYS WE GET INSTRUCTED FOR THIS

- Acquisition-only briefs — image now, analyse later (or never).
- Scene attendance — we travel to your evidence.
- Acquisition + analysis — single instruction, single team, single report.
- Second-opinion acquisition — where a previous attempt failed or is in question.
- Research-led acquisition — where a method needs validating before it can be used.

CAPABILITY · THEME TWO OF FOUR

Understand the data.

Once the data is in the lab, the real work begins. What does it mean. Where did it come from. What is missing. Who, when, how, and how confident. Method-led analysis with the limits of inference clearly stated and the workings shown.

Memory, malware, intrusion

Volatile memory analysis, malicious code, anti-forensics, APT investigation, persistence mechanisms.

Volatile · Malware · APT

Video, image, audio enhancement

CCTV recovery, evidential continuity, frame-by-frame analysis, authentication, AI-generated media detection.

CCTV · Audio · AI-media detection

Document, metadata, authenticity

Hidden content, version history, drafting trails, authorship indicators, forgery and tampering analysis.

Metadata · Versioning · Authenticity

App, browser, behavioural

SQLite, cache, history, JSON, cross-platform artefacts, deleted-but-recoverable data, encrypted services.

Browser · App artefacts · Patterns

OSINT & open source

Dark web, social media, archived material, attribution, evidential and ethical considerations.

OSINT · Attribution · Ethics

Correlation & timeline

Multiple sources reconciled into one defensible timeline. Where sources agree, where they don't, what that means.

Timeline · Correlation · Inference

CAPABILITY · THEME THREE OF FOUR

Present the data.

Findings only matter if they can be understood and used. Right format for the right audience, at the right level of detail, with the right disclosure of limits. We often deliver more than one format for the same case.

REPORTING FORMATS · PICK FROM

Full technical report

Method, findings, exhibits, limitations. For internal investigations, technical handovers, onward instruction.

Court-ready expert report

Civil, criminal, family, tribunal. CPR Part 35 / CrimPR Part 19 compliant. Independent, balanced, written for a non-technical court.

Short report or update

One- to four-page summary. Status, findings to date, next steps. For ongoing investigations or board-level decision points.

Verbal briefing

In person or video. On-the-record or in confidence. For legal teams, leadership, operational handovers.

Triage & disclosure review

Non-technical specialist review of large data sets with a full forensic audit trail. ReviewBox platform or yours.

Visualisation & exhibits

Timeline graphics, map overlays, demonstrative exhibits designed for the audience that will see them.

Police handover pack

Structured transfer for investigating officers, with chain of custody, exhibit references, and continuity intact.

Pre-action advisory

Early technical advice on whether a case has digital-evidence merit, what to preserve, what to ask for.

Courtroom testimony

Expert witness attendance, examination and cross-examination, prepared to communicate complex findings under pressure.

CAPABILITY · THEME FOUR OF FOUR

Solve the unsolvable.

Where commercial tools stop and the case still needs answers. The category that most clearly defines SherFox. New method, new kit, validated for evidential admissibility, documented carefully enough that the result holds.

Bespoke research

When the case asks a question nobody has answered yet. Realistic timelines, evidential considerations, a clear contract for what counts as success.

Custom tooling

Where commercial tools don't exist, or don't suit the brief, we build what we need. Sometimes the tool is the deliverable; more often it makes the deliverable possible.

Method validation

Validating an unusual technique for evidential admissibility before applying it to live casework. Documented process, controlled tests, scientific defensibility.

Second opinions & peer review

Quiet, sealed-instruction technical critique of opposing expert reports. Identifies method gaps, factual errors, and overreach.

Corporate & insider matters

Discreet internal investigations, breach response, insider threat. Minimum operational footprint, defensible to a regulator's standard.

Incident response

APT response, malware investigation, cloud incident, encryption, volatile data preservation. Alongside your team if you have one.

NOT EXHAUSTIVE · ASK ANYWAY

The themes above are a starting menu, not a ceiling. If the brief is unusual, edge-case, or sounds like nobody else can help, that's exactly the conversation we like having.

HOW WE DELIVER

How we deliver.

Engagements scoped honestly, contracted cleanly, delivered in the format the case actually needs. Reports prepared to CPR Part 35 / CrimPR Part 19 standard, ready for civil, criminal, family, and tribunal proceedings.

EXPERT WITNESS ROUTES

Independent expert witness

Instructed by claimant, defendant, or prosecution. Full report, supplementary opinions, court attendance.

→ INSTRUCTIONS VIA SOLICITOR

Single Joint Expert (SJE)

Where parties agree to share one expert. Cost-effective, court-friendly, a substantial part of our civil work.

→ JOINT LETTER OF INSTRUCTION

Peer review of opposing reports

Technical critique of an existing expert's work. Identifies method gaps, factual errors, overreach.

→ SEALED-INSTRUCTION BASIS

Pre-action & advisory

Early technical advice on whether a case has digital-evidence merit, what to preserve, what to ask for.

→ SHORT ENGAGEMENT LETTER

HOW WE WORK · EVERY ENGAGEMENT

01 Scope call
No-commitment. Confirm fit, no conflict, what good looks like.

02 Quote
Tailored to scope, timescale, complexity. You proceed when satisfied.

03 Examination
Lab work, scene work, or hybrid. We travel where the brief requires.

04 Delivery
In the format the case needs. Trauma-aware throughout.

THE BASICS

Contracting via ECS Partners, CPR-compliant reports, chain of custody, NDAs, trauma-aware delivery, University-backed indemnity — all detailed on page 9.

WHAT IT COSTS

What you can expect to pay.

We don't publish day rates because every engagement is different. To save you an email exchange to find out if we're affordable, here's what typical engagements look like — ballpark figures, not quotes. Actual pricing depends on scope, complexity, and timescale.

WORKED EXAMPLES · INDICATIVE ONLY

Acquisition only

Single mobile device, standard model. Image, verify, hash, short technical handover. Fixed fee.

FROM £1,500

Expert witness

Mid-complexity civil matter. Examination, full CPR-compliant report, one round of supplementary.

£8K – £25K

The unsolvable

Custom acquisition rig, undocumented hardware, peer-reviewable methodology. Day rate, scope evolves.

DAY RATE

HOW WE BILL

Fixed fee
Scope is well-defined. Acquisition, peer review, short

Day rate
Scope is open. Investigations, advisory, complex matters.

Retained
Across multiple matters over a period.

Framework
Existing procurement framework — ask first.

Legal aid
We take it where the case fits. Tell us early.

Bursary
CPD: unemployed practitioners, alumni, SMEs.

HOW TO INSTRUCT US

Initial consultation is no-charge — we confirm fit, conflicts, and what good looks like before any quote is issued. Email hello@sherfoxlabs.com to start the conversation.

SECTION FOUR

CPD TRAINING.

Fifteen practitioner-led courses across foundations, devices, scene, technical masterclasses, advanced, and presentation skills. Delivered inside Cyberly, with first-principles teaching, 50%+ hands-on, trauma-informed by design.

24 How We Teach

25 Course Catalogue — Foundations · Devices · Scene

26 Course Catalogue — Technical · Advanced · Presentation

HOW WE TEACH

First principles. By hand.

Most digital forensics training teaches you a tool. We teach you the underlying science — artefacts, file structures, binary, the why. When the tool changes, when the parser breaks, when the vendor pulls support, you still know what you're looking at.

First principles

Durable knowledge that survives the next OS update or parser change. You learn what's happening inside the device, not how to click through a wizard.

Hands-on throughout

Live practicals on real evidence with fictional victims. You're at the keyboard more than half the week. Instructors watch what you type.

Practitioner-led

Every course taught by someone in active casework. They know why a step matters because they watched it matter on a real case last week.

Trauma-informed

Every course runs inside Cyberly. Realistic technical challenge, fictional victims, zero exposure to real distressing material.

EVERY COURSE COMES WITH

Immersive operations

Briefings, scenes, interviews — animated videos and live sessions.

Virtual learning environment

Per-module VLE with materials, datasets, exercises, Cyberly resources.

Operation portal

Live case board, evidence registry, exhibit handling, briefing notes.

Comprehensive workbook

Take-away physical workbook plus a downloadable pack.

12 months online access

Materials and practice environments stay accessible for a year after.

Real instructors, small cohorts

Sensible class sizes. Instructors who spot when a day lands heavy.

COURSE CATALOGUE · 1 OF 2

Foundations, devices & scene.

7 OF 15 PRACTITIONER-LED COURSES · CONTINUES OVERLEAF

FOUNDATION

Digital Forensic Essentials — 8 DAYS
Complete foundation. First principles to a basic technical investigation.

DEVICE FOCUSED

Data Capture Wizard — 5 DAYS
Acquisition and storage media. Chip-off, JTAG, legacy formats, integrity verification.

Mobile Sleuth — 3-5 DAYS
Mobile device investigations across operating systems and hardware platforms.

IoT Inspector — 5 DAYS
Unusual devices, vehicles, appliances, home assistants, undocumented hardware.

SCENE ANALYSIS

Scene Specialist — 3-5 DAYS
Scene investigations using our immersive IoT crime scene room.

Guardian Eye — 5 DAYS
CCTV analysis: recovery, conversion, evidential continuity, courtroom presentation.

Security Sentinel — 5 DAYS
Corporate security and incident response. Frameworks, triage, containment, reporting.

ALL COURSES LIVE INSIDE CYBERLY

Bespoke datasets, evolving scenarios, fictional victims. Real technical challenge, no exposure to real distressing material.

COURSE CATALOGUE · 2 OF 2

Advanced & specialist.

8 OF 15 PRACTITIONER-LED COURSES · CONTINUED FROM OVERLEAF

TECHNICAL MASTERCLASS

AppTracker
Browser and app forensics: cache, history, SQLite, JSON, cross-platform artefacts.
5 DAYS

Comms Data Analyser
CDRs, telecoms, messaging, VoIP, modern encrypted services.
3-5 DAYS

Cyber Sleuth
Network and corporate intrusion investigations: traffic, logs, APT.
5 DAYS

Document Detective
Metadata, hidden content, version history, embedded artefacts.
5 DAYS

Multimedia Marvel
Image, video, audio analysis. Authentication, EXIF, splicing, AI-media detection.
5 DAYS

Open Source Intel Operative
OSINT: frameworks, ethics, social media, archiving, evidential considerations.
5 DAYS

ADVANCED

Digital Forensics Masterclass
For experienced practitioners. Encryption, anti-forensics, volatile data, correlation.
5 DAYS

PRESENTATION

Evidence Articulator
Communicating digital evidence: reports, testimony, plain language under pressure.
3-5 DAYS

READY TO BOOK?

Email hello@sherfoxlabs.com for the booking process. Corporate email preferred; courses aren't listed publicly for security reasons. Bursaries available for unemployed practitioners, alumni, independents, SMEs, and existing ECS relationships. Pricing £2,600–£4,500 depending on content and duration.

SECTION FIVE

RESEARCH & TOOLS.

05

Applied research at higher TRLs because the problems are real and waiting. Home-built software and hardware where the market didn't have what we needed. Plus an unofficial aim of winning an Ig Nobel, just to keep us honest.

28 Research Division

29 Active Projects

30 Tools We Built

RESEARCH DIVISION

Casework feeds research.

SherFox research isn't separate from operational work. It comes out of casework — the awkward questions real investigations keep asking — and it goes back into casework, both ours and the wider community's. We move quickly into higher TRLs because the problems are real, current, and waiting.

Our datasets live inside Cyberly wherever possible, so we can tackle hard problems without exposing the team or our collaborators to unnecessary distress.

RESEARCH HERO · IoT SCENE ROOM / BENCH-WORK / LAB IN ACTION

DROP IMAGE HERE

WHY OUR RESEARCH LOOKS LIKE THIS

Device exploitation
At the limits of what devices yield

Digital espionage & intelligence
At higher TRL

Data recovery & destruction
From the scene examiner's perspective

IoT & scene intelligence
For live investigations

Mental health in DF
As a research discipline

Synthetic environments
For trauma-informed research and training

UNOFFICIAL AIM · WIN AN IG NOBEL

Our actual aim is to make a real difference. The Ig Nobel keeps us honest about not taking ourselves too seriously. A lab that takes itself too seriously is a lab that burns out.

PUBLICATIONS, STANDARDS, SPEAKERS

We publish at conferences, in journals, and through the University. A portion of our research is closed-publication by client agreement — restricted briefings available where appropriate. Speaker enquiries, citation lists, and recent papers welcome.

ACTIVE PROJECTS

What we're working on right now.

Each project started with a casework question — the awkward kind that real investigations keep asking — and each is designed to feed something useful back to the wider community.

ACTIVE · IN-HOUSE FACILITY

IoT Crime Scene Room

A physical, heavily IoT-equipped scene room. Automated interactions, evidential changes triggered during simulated scenes. Studies how devices interact, what they produce,

→ IMPACT *Better IoT scene response*

ACTIVE · CHURCHILL FELLOWSHIP

Mental Health in DF

Three core questions: why is there a problem, what would help, where does best practice exist? Led in part by Sarah's Churchill Fellowship investigating DF mental health

→ IMPACT *Practitioner wellbeing & standards*

ACTIVE · SCENE-EXAMINER

Data Destruction Awareness

What scene examiners need to know when encountering home-based data-destruction approaches — and how to preserve or recover evidence in those scenarios.

→ IMPACT *More recoverable evidence*

ONGOING · LIVING PLATFORM

Cyberly World

Continuous expansion of the fictional investigation universe. New datasets, scenarios, case files, IoT environments, research challenges.

→ IMPACT *Sandbox the community can use*

TOOLS

Tools we built.

The commercial market doesn't always make what you need, especially at the edges of what's technically possible. So we build things. Some tools aren't listed for operational reasons.

SOFTWARE & PLATFORMS

ReviewBox

OPERATIONAL

Triage for non-technical specialists. Audit trail intact.

SCOUT

OPERATIONAL

Semi-automated source triage. Standardised, minimal interaction.

AURORA

OPERATIONAL

Framework for choosing the right acquisition method.

HARDWARE & PHYSICAL

SignalSentinel

OPERATIONAL

Faraday bag integrity tester. Detects signals, flags degradation.

SpectrumAcquire

OPERATIONAL

Mobile device acquisition where commercial tools can't.

BOB

OPERATIONAL

Boundaries, Objects, Broadcast. Scene triage robot.

RESEARCH & TRAINING

The Lattice

OPERATIONAL

Interactive IoT evidence environment. Models scene interactions.

Cyberly World

ACTIVE · EVOLVING

Purpose-built fictional investigation universe.

"if we needed it & it didn't exist, we built it."

SECTION SIX

BEYOND CASEWORK.

06

Mental health advocacy because the work can be heavy. Outreach because public understanding matters. Student projects because the next generation is out there. Bid collaboration because the best research is done together.

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35 Bids & Project Collaboration

ADVOCACY

Mental health in DF.

CHURCHILL FELLOWSHIP · NATIONAL CAMPAIGNING · ACTIVE RESEARCH

"The work can be heavy. So we balance it with humour, colour, and more than a hint of cheesiness."

WHY THERE'S A PROBLEM

Digital forensics practitioners regularly confront some of the most distressing material imaginable, viewed repeatedly, often without adequate support, in environments that don't acknowledge the human cost.

It's systemic. Cultures that prize stoicism over honesty mean many practitioners suffer in silence. Some leave the profession. Some experience lasting harm.

At SherFox we believe this has to change. Mental health isn't an afterthought to professional practice — it's part of professional practice.

WHAT WE'RE DOING ABOUT IT

Churchill Fellowship
Sarah's Fellowship investigates DF mental health internationally.

National campaigning
Contributing to efforts that raise awareness and shift culture.

Cyberly
Skill development without unnecessary exposure to distressing material.

Trauma-informed training
Every SherFox course is designed with this in mind.

FOR ORGANISATIONS

If you lead a team of DF practitioners, we can work with you on building trauma-informed approaches into your practice, training, and culture. Not a tick-box exercise — an evidence-based process.

LOOKING AFTER PEOPLE

If this work is taking a toll, there are people who can help.

SAMARITANS	116 123 · samaritans.org · 24/7, free, confidential
MIND	mind.org.uk · mental health charity
OSCAR KILO	oscarkilo.org.uk · police wellbeing services
UK COPS	ukcops.org · Care of Police Survivors

OUTREACH & COMMUNITY

Outreach & community.

We're an academic lab, so public engagement is part of who we are. We talk to schools, professional groups, community organisations, and press. We do it because digital forensics is fascinating, because the next generation of practitioners is out there, and because demystifying the work helps everybody.

School & college visits

Primary careers talks through to sixth-form workshops. Hands-on exercises, sanitised real artefacts.

Talks for groups

Professional bodies, industry groups, conferences, internal staff days. Technical deep-dives or broader pieces.

Public lectures

Open lectures at the University and elsewhere. For engaged general audiences: what DF actually does, where it's going.

Science-based comedy

Yes, really. Stand-up, science nights, festival appearances. The work is interesting; we're happy to be funny about it.

Charity work

Mental health in emergency services, victim support, online safety. Time, expertise, platform.

Media work

Comment, interviews, technical advice for journalists, podcast appearances, documentary contributions.

BOOK US

Most outreach is offered on a goodwill basis where it serves a public-interest purpose; some attracts a fee depending on scope and travel. If you're thinking about an event, format, or audience we haven't covered — ask anyway. Email hello@sherfoxlabs.com.

STUDENTS

Student projects.

We sit inside a major university, which means we have students — talented, motivated, looking for real-world projects with real-world supervisors. If you have a problem that would make a brilliant final-year, MSc, group, or doctoral project, we want to hear about it.

3rd Year

Final-year undergrad dissertation. Single student, technical depth, well-defined problem.

Single · ~9 months

MSc

MSc dissertation: focused, technical, summer-delivered. Strong for prototyping.

Single · ~3 months

MSc Group

Team of 4–6 students tackling a larger problem with multiple workstreams.

4–6 students · ~4 months

Doctoral

Funded PhDs supervised at Southampton, via CDTs, Doctoral Landscape Awards, or industry partner.

~4 years · funded

Innovation Project

Multidisciplinary student team treats your problem as a ~4-week consultancy brief.

Team · ~4 weeks

Hosted researcher

Visiting researchers, sabbatical fellows, seconded practitioners. Short or long stays.

Flexible

WHAT MAKES A GOOD BRIEF

- A real problem, not a make-work exercise
- Scoped to fit — we'll help shape it
- Tractable data — under NDA or in Cyberly
- A point of contact — start + touchpoints

WHAT IT COSTS

- No fee — Innovation Project, MSc, MSc Group, 3rd Year
- Partial or full funding — Doctoral & longer embedded research
- Talent visibility — excellent students who could become hires

COLLABORATION

Bids & project collab.

LETTERS · CO-I · IN-KIND · BOTH WAYS

If you're writing a research grant, an industry bid, or a consortium proposal, and a credible, practitioner-grounded digital forensics partner would strengthen it, we like those conversations. It works both ways — when SherFox is leading, partner letters of support and in-kind contributions from you are equally welcome.

WHAT WE CAN GIVE

Letter of Support
University letterhead. Endorsement, indicative engagement, in-kind.

Project Partner
Named partner contributing expertise, data, advisory time, facilities.

Co-Investigator
Named Co-I, contributing research time, supervision, workstream lead.

Advisory Board seat
Steering group, project advisory board, technical reference panel.

WHAT WE'D LOVE FROM YOU

Letter of Support
Your endorsement on partner letterhead strengthens our case.

In-kind contributions
Anonymised data, scenarios, case studies, kit access.

Industry insight & advisory
Sit on a steering group, contribute use-cases, advise.

Co-investment
Cash or in-kind matching on co-funded calls.

FUNDING ROUTES WE WORK WITH

KTPs
Embedded graduate, 12–36 months.

Prosperity
Long-term co-invested research.

CDTs / DTPs
Doctoral training partnerships.

Responsive Mode
Standard grant calls, Co-I.

Industry Calls
Strategic industry-led calls.

Doctoral Landscape
Co-developed PhD projects.

Innovation Loans
Late-stage productisation.

EU & International
UK academic collaborator.

START EARLY

2 weeks before deadline is doable, 2 months is much better. Email hello@sherfoxlabs.com with funder name, call name, deadline, and what you need from us.

"Brains,
heart,
& a touch
of cheese."

SHERFOX LABS.

DIGITAL FORENSICS · EXPLOITATION · INTELLIGENCE

UNIVERSITY OF SOUTHAMPTON · EST. 2022 · CASEWORK-LED RESEARCH