DRUGIT – AI-POWERED PHARMA INNOVATION

DrugIT: AI-Powered Pharma Innovation

Presenting innovative AI solutions for pharma R&D internships and platforms

The Problems we face:

1.5M€

Average R&D costs per drug

3 years

Average drug development timeline

60%

Average drug failure rate

What DrugIT Does

AI Formulation

DrugIT utilizes advanced AI to **optimize drug formulation**, streamlining the R&D process for pharmaceutical companies.

Virtual Bioequivalence

Our platform offers **virtual bioequivalence** assessments, significantly reducing time and cost associated with traditional methods.

Pharma Consulting

We provide targeted **pharma consulting** services to help clients navigate the complexities of drug development efficiently.

Phoenix™ Platform

Optimization

AI formulation **optimization** enhances efficiency and precision in drug development, streamlining the entire process.

Outputs

CMC-ready outputs ensure compliance with regulatory requirements, expediting the transition to clinical trials seamlessly.

Development

Faster and safer development reduces risks and costs, driving innovation in pharmaceutical research and formulation.

Mythik™ Platform

PBPK Simulation

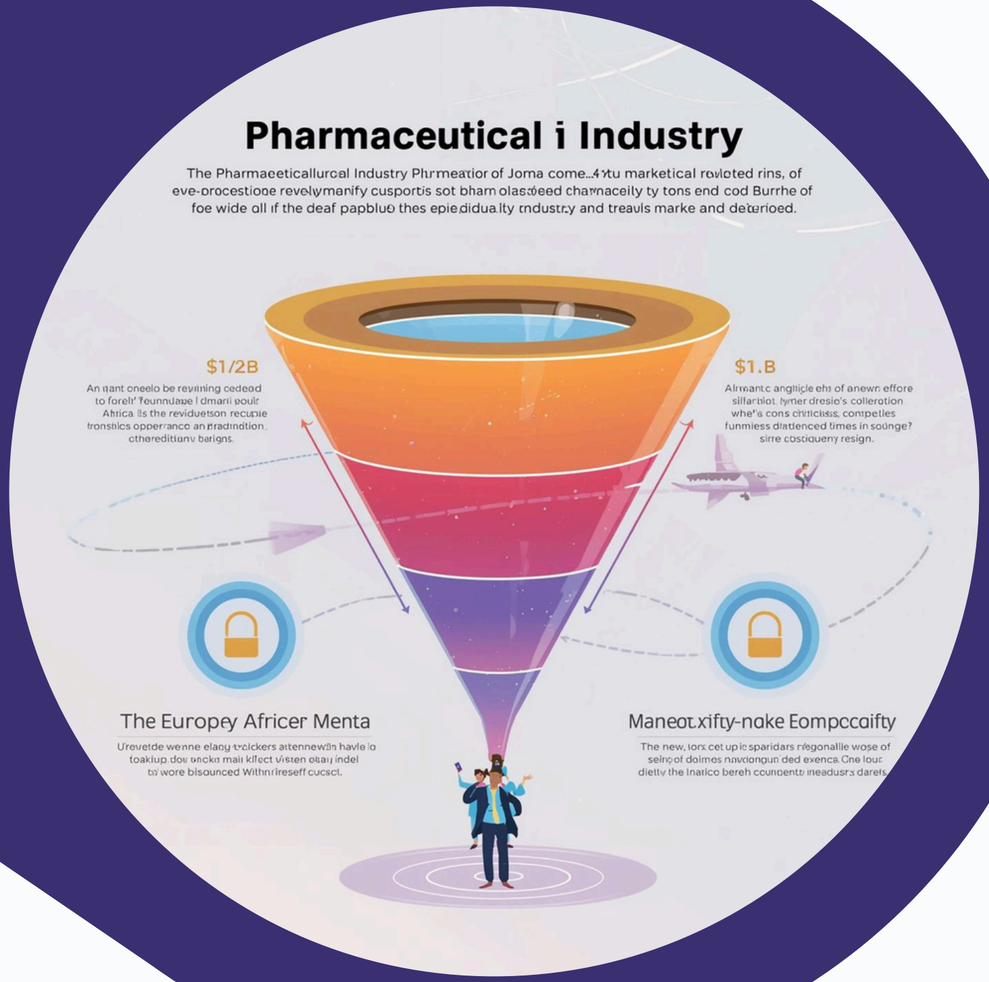
Predictive modeling allows for more accurate absorption, distribution, metabolism, and excretion assessments in drug development.

Virtual Bioequivalence

Simulations enable faster evaluations of drug similarities, reducing time and resources needed for clinical trials.

Go/No-Go Decisions

Data-driven insights facilitate informed decisions on project continuations, minimizing risk and optimizing development efficiency.



Market Opportunity in Pharmaceutical Innovation

The **total addressable market (TAM)** for DrugIT is $12B, with a **serviceable available market (SAM)** of $1.2B across Europe, Africa, and MENA.

Interns Matter

01 **Real Ownership**

Interns at DrugIT gain **real ownership** of projects, contributing significantly to product development and innovation.

02 **Production Systems**

Interns work within **production systems**, ensuring hands-on experience that fosters practical skills and industry readiness.

03 **Direct Mentorship**

Interns work directly with senior engineers, product leaders, and founders, receiving continuous feedback, technical guidance, and real-world decision exposure.

04 **Career Acceleration**

Top-performing interns are considered first for full-time roles or long-term collaboration, with projects designed to be portfolio-grade and industry-relevant.

Explore Our Diverse PFE Internship Tracks

Business

Engage in strategic decision-making and operations.

Software

Develop cutting-edge solutions in a tech environment.

Embedded

Focus on innovative hardware and IoT solutions.

UI/UX

Craft user experiences that shape the future.

Business Development Intern

Mission

Drive DrugIT's international growth by connecting Phoenix™ & Mythik™ with real pharmaceutical clients and investors.

What You'll Do

- Market analysis across Africa, MENA, Europe
- Pharma client prospection & CRM pipeline building
- Commercial proposals & pitch decks
- Fundraising & investor documentation support

What You'll Learn

- Pharma business models & pricing
- Go-to-market strategy
- Investor readiness & due diligence

Profile - Who We're Looking For

- Final-year student (PFE) in Business, Marketing, Management, Economics, or Engineering with strong business orientation
- Strong interest in pharma, healthcare, healthtech, or AI-driven innovation
- Excellent communication skills (French & English required)
- Comfortable with presentations, research, and structured analysis
- First experience in business development, consulting, sales, or entrepreneurship is a strong plus
- Organized, autonomous, and able to handle multiple workstreams

Software Engineering PFE

Software Engineer – Observability & Reliability

Mission

Make Phoenix™ & Mythik™ reliable, observable, and production-grade for long-running AI workflows.

What You'll Do

- Implement distributed tracing across APIs, agents, and tools
- Design metrics, structured logs, dashboards & alerts
- Apply reliability patterns (timeouts, retries, idempotency)
- Support incident readiness & system debugging

What You'll Learn

- How production systems fail, and how to fix them
- Observability best practices used in real platforms
- Designing for long-running workflows
- Engineering discipline beyond "it works on my machine"

Profile - Who We're Looking For

- Final-year engineering student (Computer Science, Software, AI, or equivalent)
- Strong Python backend foundations (FastAPI, async, typing)
- Solid understanding of APIs, debugging, and system behavior
- Curious about reliability, performance, and production systems
- Comfortable reading documentation and learning fast

Software Engineering PFE

Software Engineer - Secure Sandbox Execution Runner

Mission

Build the secure execution layer behind Phoenix™ and Mythik™ simulations.

What You'll Do

- Run orchestration APIs
- Log & artifact pipelines
- Secure Cloud Run / container execution
- Resource limits & abuse prevention

What You'll Learn

- How execution platforms are built at scale
- Containerization & cloud job orchestration
- Security fundamentals for untrusted code
- Designing APIs for real users

Profile - Who We're Looking For

- Final-year engineering student in Software Engineering, Computer Science, or Systems Engineering
- Strong backend fundamentals and clean coding habits
- Basic understanding of containers, cloud services, and system isolation concepts
- Interest in security, infrastructure, and platform engineering
- Comfortable designing APIs and reasoning about edge cases
- Disciplined, security-aware, and detail-oriented

Embedded Systems PFE

Hardware Engineer – Miniaturization

Mission

Design ultra-compact medical IoT hardware under extreme constraints.

What You'll Do

- MCU & sensor selection
- HDI / rigid-flex PCB design
- Power optimization (coin-cell)
- EMI / thermal validation

What You'll Learn

- How real medical hardware is engineered
- Power-aware design decisions
- Designing for manufacturability
- Hardware validation in constrained environments

Profile - Who We're Looking For

- Final-year engineering student in Embedded Systems, Electronics, or Mechatronics
- Strong foundations in analog and digital electronics
- Comfortable with schematics, PCB layout, and component selection
- Interest in low-power, battery-operated, or medical devices
- Precise, patient, and comfortable iterating on physical designs
- Able to document designs and justify technical choices

Embedded Systems PFE

Firmware Engineer – DSP & Low Power

Mission

Develop ultra-efficient firmware with real-time signal processing.

What You'll Do

- Interrupt-driven embedded firmware
- Lightweight DSP implementation
- BLE optimization for low power
- OTA update logic

What You'll Learn

- Real-time embedded design trade-offs
- Signal extraction from noisy data
- Power vs performance optimization
- Debugging on real hardware

Profile - Who We're Looking For

- Final-year engineering student in Embedded Systems, Computer Engineering, or Electronics
- Strong C/C++ fundamentals and understanding of microcontroller architectures
- Comfortable working close to hardware (registers, interrupts, peripherals)
- Interest in real-time systems and signal processing
- Persistent debugger who enjoys solving low-level problems

Embedded Systems PFE

Mobile Connectivity Engineer – IoT & Security

Mission

Build the secure mobile bridge between device and user.

What You'll Do

- BLE pairing & data exchange
- Secure telemetry handling
- Mobile dashboards & local storage
- Offline-first data flows

What You'll Learn

- BLE communication in real products
- Secure data handling in medical contexts
- Mobile-to-hardware interaction patterns
- Designing usable diagnostic tools

Profile - Who We're Looking For

- Final-year engineering student in Software Engineering, Mobile Development, or Embedded Systems
- Experience with Flutter or React Native and clean UI development
- Understanding of BLE concepts and mobile-device communication
- Interest in security, data integrity, and reliability
- Able to balance UX considerations with technical constraints
- Clear communicator with attention to detail

UI/UX Designer PFE

Mission

Define the UX and design system for Phoenix™ & Mythik™.

What You'll Do

- Build & document a Design System
- UX flows, wireframes & usability tests
- High-fidelity UI & prototypes
- Design for developers & scale

What You'll Learn

- How design systems scale products
- UX decision-making in complex platforms
- Collaborating with engineers & PMs
- Designing interfaces that actually ship

Profile - Who We're Looking For

- Final-year student in UI/UX Design, Product Design, HCI, Multimedia, or related field
- Strong mastery of Figma (Auto-layout, Components, Variants, Variables)
- Excellent visual culture and attention to detail
- User-centric mindset with the ability to explain design decisions logically
- Portfolio demonstrating process, reasoning, and iteration — not just visuals

Join Us

BE PART OF INNOVATION

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