

#### STAY IN TOUCH 保持联络 We love to hear from you! 欢迎与我们联系

Energsoft Data Analysis Software Energsoft 数据分析软件

+1.425 246 1675 slava@energsoft.com https://energsoft.com ENERGSOFT 软能

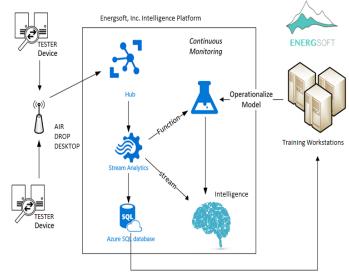
## What does EnergSoft sell 能解决什么问题?

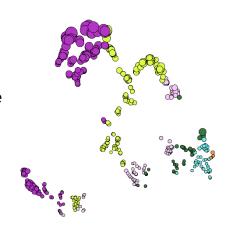
EnergSoft solves your data analysys problem by delivering a data management and analytics solution tailored to the needs of the battery industry. Our cloud-hosted platform gives swift insights into your battery designs to dramatically accelerate the R&D process. With EnergSoft analytics, you get products with superior performance and consistency while reducing development cost and time-to-market.

EnergSoft 为电池企业提供量身解决的数据管理和数据分析系统。我们的云端平台能帮助电池设计者大幅加快 R&D 的进程。通过 EnergSoft 的数据分析,企业将获得兼具高效能和高稳定性的产品,同时降低开发成本、缩短产品上市的时间。

- 1. Reliable backup and disaster recovery systems 可靠的备份和数据恢复系统
- Advanced cloud analytics and machine learning
  先进的云分析和机器学习功能
- 3. Safe, encrypted data storage 安全、加密的数据存储功能
- 4. Scalability and better IT infrastructure 可规模化以及更优化的 IT 基础架构
- 5. Proven increases in the consistency and confidence of result 经实践证明可增加研发测试的信度和效度

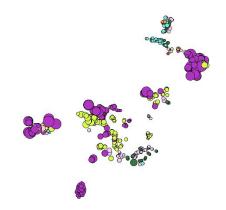
EnergSoft's proprietary algorithms help minimize challenges and bottlenecks in battery development. We can automate data collection, data stitching, and statistical data analysis. Our proactive deep-learning methodology uses your data to identify design problems and reveal the true impact of material choices, process changes, and test settings. Key investments in analytics software can boost your pace and improve results. You may be curious about these circles on the left, and right? These are thousands of





batteries clustered by deep neural networks using Deferential Capacity, Resistance, Voltage and Current curves with t-Distributed Stochastic Neighbor Embedding (t-SNE).

EnergSoft 的优先算法可在电池开发过程中最小化技术上的挑战与瓶颈。我们能帮助企业实现自动化数据的收集、拼接、以及数据的统计分析。我们的主动深度学习技术可通过分析客户产生的数据来辨识出研发中产生的问题,并会提示材料选择、流程变更、及测试方式对研发结果可能产生的影响。你可能会好奇本页左右两边展示的这些小圆圈是什么?这些是由深度神经网络聚合成串的上千个电池。该效果通过具有t分布随机邻域嵌入的微分容量,电阻,电压和电流曲线来实现(t-SNE)。



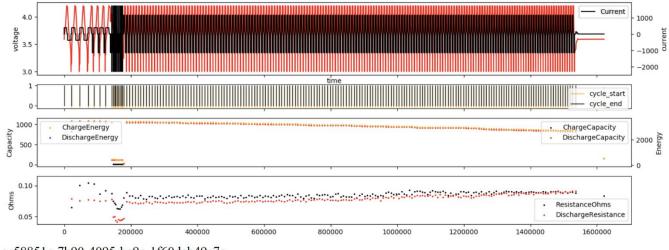
### Who are we 我们是谁?

EnergSoft is a company headquartered in Seattle, Washington, the United States that produces interactive data visualization products focused on battery and energy storage intelligence. It initially began to commercialize research which had been conducted at Washington University's Department of Foster School of Business and Material Science between 2016 and 2018. It was founded as Delaware corporation in March 2018 by Slava Agafonov, who specialized in artificial intelligence techniques



for analyzing and exploring battery data. The product queries hardware devices for energy storage test, research and development or customer data streams in the field then generate customizable graph types with statistical summary and predictive data analytics with artificial intelligence.

EnergSoft 是一家总部位于西雅图(美国,华盛顿州)的交互数据分析公司。我们的数据可视化产品专注于帮助电池和能量存储方面的专家更好地进行他们的研发工作。公司的成立缘起于华盛顿大学商学院与材料科学院的于 2016 和 2018 年的两次研发合作。最终在 2018 年月,人工智能领域专家 Slava Agafonov 正式创立了 EnergSoft(注册为特拉华州公司),而他的研究方向正是电池数据的分析与探析。我们的产品可以对硬件设备进行能量存储测试、收集研发和用户数据流,然后通过人工智能分析生成可定制的统计数据图及预测性的数据分析。



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# Why should I care? 我们的产品将如何帮助您?

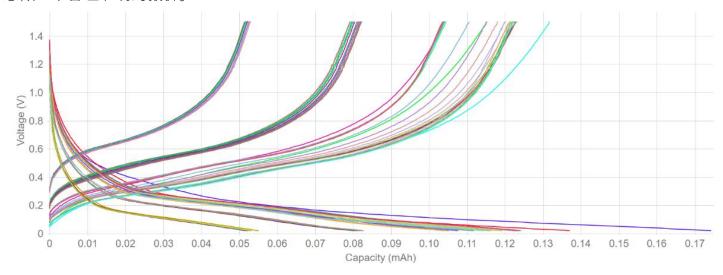
In modern powertrain configurations such as hybrid vehicles, pure electric vehicles or any energy storage, batteries are used for electrochemical energy storage and conversion. These energy storage systems have to meet the market requirements such as durability, high standards, power density, and energy performance for high dynamic charge and discharge processes. The most important development tasks for energy storage systems are the optimization of safety, life-time and costs. Energsoft offers accurate and reliable as well as innovative and efficient approaches for testing these ever-increasing demands with a fully configuration and easy to use interface. We have integrated support for devices in your lab, and unified data management.

在诸如混合动力车,纯电动车或任何其他涉及能量存储的现代动力系统的配置方案中,电池用于电化学能量存储和转换。这些能量存储系统必须满足市场的期待,例如耐用性,高标准,功率密度,动力性能等,来满足高频率充放电的需求。而对任何能量存储系统的开发来说,最重要的是提高安全性,增长使用寿命并降低制造成本。Energsoft 提供准确可靠,创新高效的方法,通过全面系统化的配置和易于使用的界面来满足开发者的这些需求。我们对用户在实验室中的仪器提供多种支持,并且提供统一有效的数据管理方案。

Every lab, manufacturer, and certification company has its own internal processes. No single solution fits all needs, so EnergSoft builds custom software modules to accommodate any situation. We provide accurate cost estimates based on a thorough evaluation of your product requirements, scope, and responsibilities. Energsoft involves our customers in each step of tailoring our solution to their environment, working side-by-side with the customer to ensure the result is an effective, reliable solution to their needs. Energsoft is always expanding our commitment to delivering the most cost-effective battery analytics solutions for our clients' workloads. There are many big data and analytics

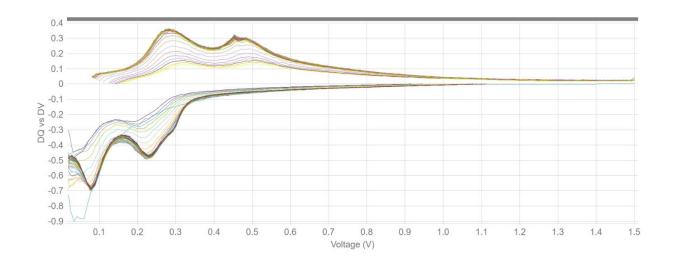
players, but very few battery analytics players on the market and none with the advanced capabilities of EnergSoft's cloud analytics platform. Send us a few data files and use your free trial to see what insights EnergSoft can deliver while we put together an accurate quote.

任何一个实验室,制造商,或认证公司都有自己的一套内部流程。没有一种解决方案可以满足所有需求,而 EnergSoft 提供自定义软件模块可以适应任何情况。我们会根据您对产品要求,范围和职责的全面评估,提供准确的成本估算。在和客户合作的每一步中,EnergSoft 都会根据客户的业态环境来调整配合,与客户并肩工作以确保结果能有效满足客户的需求。 Energsoft 始终致力于为客户提供最具性价比的电池分析解决方案。市场上有许多提供大数据管理和分析的公司,但很少有专注于电池行业的相关公司,更没有一个公司能拥有 EnergSoft 云分析平台这样的高级功能。如您感兴趣,可向我们发送一些数据文件做一次免费体验,来深度了解 EnergSoft 能为您提供的数据洞见和服务,同时也可以让我们为您做一个合理准确的报价。



# Key benefits 关键优势:

- 1. Lowers your product development costs more than competitors 帮助您实现比竞争对手更低的产品开发成本。
- 2. Ability to develop customer-specific solutions in all power ranges 能够在所有功率范围内为客户提供特定的解决方案。
- 3. Top engineers with deep experience in data science and enterprise software 具有丰富数据科学和企业软件经验的顶尖工程师为您服务。
- 4. 4. Powered by the latest technologies in deep-learning Al. 采用深度学习人工智能领域里最新的技术。



### THE ANALYTICS & PLATFORM FEATURES

数据管理分析 & 平台特性

- User-Friendly Interface Platform-agnostic (Mobile OS, Windows, Linux, Mac) user interface 用户友好界面 对几乎所有操作平台都可适用(手机 OS 系统,Windows, Linux, Mac 系统)
- Real-Time View Our platform integrates data streams generated in several locations for real-time display
  - 实时显示 平台集成了多个位置生成的数据流用于实时显示
- Flow-Through I/O Provides a single-entry point, harmonizing data fields for all measurement and control points from top test equipment manufacturers

流通式 I/O-提供单入口点,协调来自顶级测试设备制造商的所有测量和控制点的数据字段

 Provides Remote Access - Enables both off-site data analytics and viewing or adjusting battery operation remotely

提供远程访问-支持异地数据的分析和查看,以及远程进行调整电池的操作

 Cross-reference tests - Correlates multiple measurements with many different IEEE standards to ensure warranty specifications

交叉参考测试-将多个测量与许多不同的 IEEE 标准相关联,以确保符合保修规格

 Administration and role management - Supports different access levels for all users and customization of resource allocations for projects, roles and teams

管理员和角色管理 - 支持所有用户以不同访问级别登陆平台及管理项目,可以自定义角色和团队的线上 资源分配

• Data stitching or averaging - Supports abstractions on top of real data like connecting two files and plotting the average of each data point pair

数据拼接或平均-支持真实数据的线上抽象化管理,例如连接两个文件或绘制每个数据点对的平均值

 Refresh data and view reports - Share your projects with your partners and clients through safe, encrypted access links with customizable access expiration

刷新数据和查看报告 - 通过安全的加密访问链接,您与您的合作伙伴/客户对您的项目有可自定义的访问权限

### **Fully Charged**

As carmakers and utility services transition away from non-renewable energy sources, batteries become ever-more critical for efficient energy storage, leaving battery manufacturers racing to bring higher capacity, longer lasting batteries to market before their competitors. But in the process, they are generating more battery performance data than they can keep pace with.

随着汽车制造商和公用事业服务逐渐摒弃不可再生能源,电池对于高效储能变得越来越重要。电池制造商争相在竞争对手之前将拥有更高储蓄容量,更持久的电池推向市场。但在此过程中,他们产生的电池性能等相关数据超出了他们能够将之有效管理的能力范围。

Analyzing that data is the key to making breakthroughs and winning market share, yet inhouse analytics tools-often cobbled together to meet individual engineers' needs—don't scale to high volumes of data and fail to deliver the key performance insights researchers and business managers need to improve growth or advance invention and manufacturing.

分析并管理在电池研发生产过程中产生的数据是实现突破和赢得市场份额的关键,但内部分析工具(通常靠拼凑在一起以满足个别工程师的需求) 无法应对大量数据,也难以为研发人员或项目经理提供关键性能的洞察,而这些正是提高生产率或推进研发的关键所在。

### **Contacts**

#### 联系我们 Slava Agafonov (CEO)

How do I reach out? 联系我们、获取更多详情

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- https://www.linkedin.com/company/energsoft/







