Don't outsource. Deliver.

VisionElements
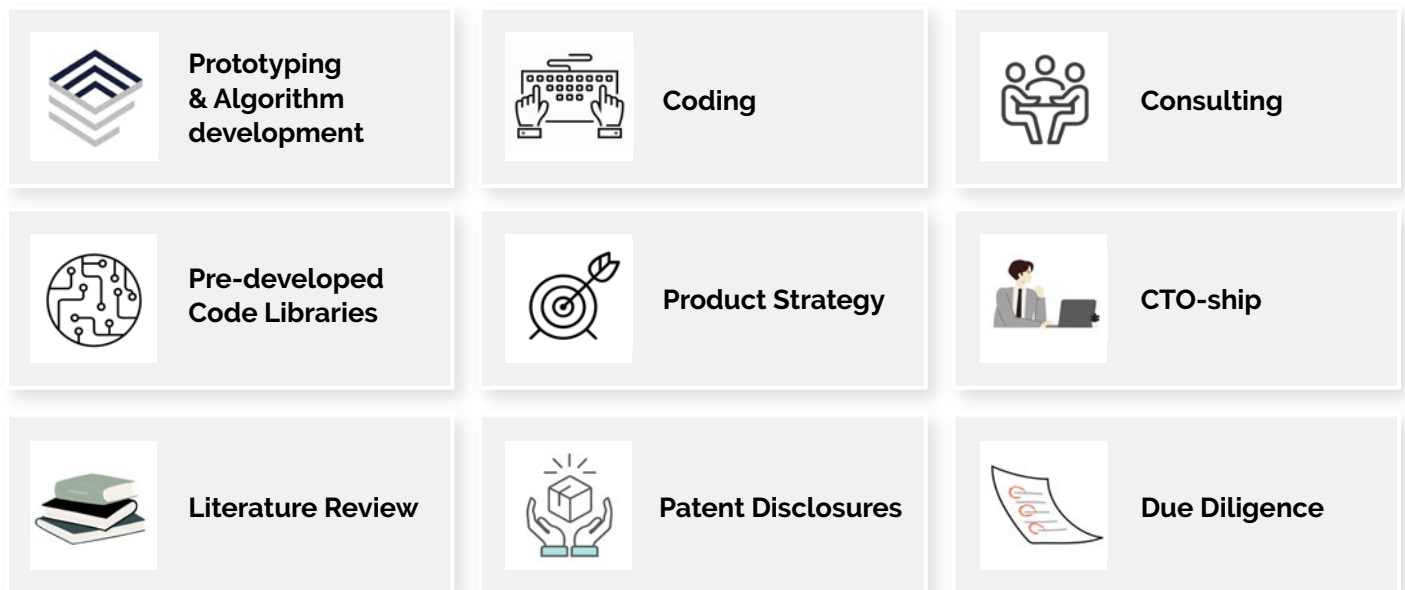
Vision Elements offers vision computing services to businesses in need of expertise in computer vision engineering and data science projects.

With a team of experienced computational scientists, Vision Elements can expedite and de-risk product development for its clients. By hiring complete, organic teams, companies can ramp up projects within a couple of weeks, allowing them to meet their deadlines and achieve their goals.

Prototyping & Algorithm development	**Coding**	**Consulting**
Pre-developed Code Libraries	**Product Strategy**	**CTO-ship**
Literature Review	**Patent Disclosures**	**Due Diligence**

AI Scientists On Demand.

NVIDIA · **PREFERRED PARTNER**

With Vision Elements, clients have the flexibility to hire an ad-hoc team to assist in solving new proof-of-concept problems, strengthen existing groups, or serve as a full early-stage R&D team. This flexibility allows clients to carefully manage their budgets and deliver faster.

Some clients have found that Vision Elements serves as their long-term backbone, providing a stable and reliable partner in a world of constantly changing working environments.

As **AI Solution Advisor in the NVIDIA Partner Network (NPN)**, NVIDIA's customers and partners across industries and around the world are able to leverage our deep knowledge of mathematical and physical modeling to expedite product development plans and go-to-market strategies.

We offer support and expertise to research, solve and implement core methodology specific to NVIDIA's technology platforms, including DeepStream SDK, Omniverse, Metropolis, TAO toolkit, Clara, Maxine, and others.
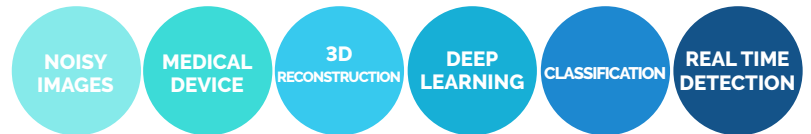
vision-elements.com

Medical Device

Customer developed an intra-procedural, image-based device, deriving physiology information for real-time decision making in interventional cardiology. It is a late-stage startup, selling to catheterization laboratories in the US, EU, and Japan.

Data scientists from Vision Elements were an integral part of its research and development team, doing white board equations and lab experiments as well as real-time working products, deployed in dozens of leading hospitals around the world.

The technical challenge for the customer's device involved deep learning of multiple x-ray angiograms, real-time 3D reconstruction of artery trees, and blood flow analyses. All running in the cath lab while a patient is diagnosed.

NOISY IMAGES · **MEDICAL DEVICE** · **3D RECONSTRUCTION** · **DEEP LEARNING** · **CLASSIFICATION** · **REAL TIME DETECTION**

Role

All of the core AI algorithms for the image-based device were developed by Vision Elements data scientists – from sketches to operational code. Vision Elements led the development of the real-time AI engine and contributed to the drafting of most of the patents in the customer's portfolio.

Approach

Our customer benefited from the flexibility needed in a long-term, research-savvy project, while receiving the most cutting-edge algorithms to enable its flagship product.

- The IP developed for the project was 100% assigned to the client.
- Proof of principle research performed by Vision Elements has been the core enabler for the client's technology.
- Code libraries developed by Vision Elements data scientists are at the heart of the client's real-time device.

Results

The real-time device has performed thousands of procedures around the world.

- The technology is considered a game changer, turning invasive measurements to ones based on remote sensing alone.
- Annual revenues generated from device sales exceeded $10m after 3 years in the market.
- The company was able to get their project to market in a timely and cost-effective manner by hiring Vision Elements data scientists for the period of time that they needed them.
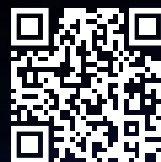
Contact Us Today

info@vision-elements.com
vision-elements.com