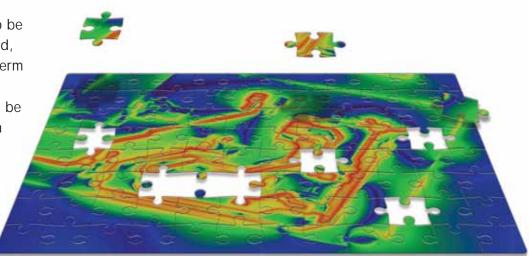
## **Remcom Consulting**

# Customized Electromagnetic Simulation Resources

## Our EM Simulation Experts Add Value to Your Team

Remcom Consulting is an ideal solution for those organizations that need electromagnetic expertise without an ongoing need for in-house EM simulation software. Remcom provides EM modeling experts, software developers, and high-end computational resources to meet your most challenging EM simulation analysis needs.

Remcom can tailor services to be as comprehensive as you need, whether it's a complex, long-term engagement or a few quick calculations. Hire our team to be your modeling and simulation "department," ensuring the success of your projects with expert electromagnetic engineering resources.





If you're missing some pieces to the puzzle, Remcom Consulting can complete it: from experienced EM engineering personnel, to design recommendations, to ultra-fast computing systems to run your calculations, Remcom can provide temporary services to take your design projects to completion.

#### Remcom Consulting Delivers Immediate Benefits

- **Electromagnetic expertise**. Our engineers can fill a void for organizations that lack internal EM resources. Our gifted team offers a unique combination of EM theory, practical application training, design engineering workflow expertise, and awareness of current industry trends that would be challenging and expensive to hire into your staff.
- Simulation solutions without the software. Let us run your challenging computations on our
  market-leading software and provide you with the results. You can achieve your design
  solutions without the investment and commitment that hiring resources and
  purchasing software tools would require.
- **Cost Savings**. Simulation of your designs can reduce your time to market while reducing costs and yielding a more reliable product.





## **Expertise**

Remcom has a long and successful history of solving challenging software problems ranging from designing and implementing CAD software to porting algorithms to new high performance computing platforms such as multicore/multiprocessor CPUs, MPI clusters, and GPUs. Our broad experience in practical and theoretical electromagnetics coupled with a desire to thoroughly understand our customers' problems result in highly successful collaborations. Contact us today to discuss your specific challenges and the ways our team can add value to your projects.

#### ■ We Offer Two Types of Consulting: Commercial and Government Contracting

**Commercial Consulting:** Remcom was the first innovator to create a universally usable, FDTD-based solver for the commercial EM market. Our electromagnetic expertise and years of partnering with customers implementing a wide variety of EM applications make us uniquely qualified to complete your product design and implementation processes. Our expert software engineers act as an extension of your design engineering team, saving you valuable time, money, and the complications of hiring EM experts internally.

Government Contracting: Remcom has performed development and analysis services for a number of government customers. As a key part of this business, the Propagation Software Division is responsible for developing and maintaining the government propagation software library known as EMPIRE. As a small business, Remcom is also eligible to bid on Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) contracts. We regularly work on such contracts, and encourage any organizations or academic institutions who are interested in collaboration to please contact us.



### Custom Software Development

Remcom can also provide customization of our products to suit your specific needs. Key technological achievements and past projects include:

- · Development of novel ray tracing algorithms
- GPU implementations of the Finite Difference Time Domain (FDTD) method by implementing a complex algorithm using CUDA
- Development of a special low frequency solver
- Custom optimization and workflow tools
- Body heating studies

#### ■ The Remcom Consulting Process

When you request Consulting services, our engineers first assess your needs and calculate the duration of the project. Through in-depth interviewing and information gathering, we provide you with the problem statement, scope of work, methodology Remcom will provide, and the deliverables you can expect.

Once we've agreed on the statement of work, we'll work together to define a schedule of deliverables, allowing you to provide critical feedback as the project progresses. We typically group the project by stages, providing you with a price quote for each stage to make it easier for you to choose those that are most crucial to your business.

Finally, we will together decide on a start date, the lead time needed, and an approximate end date (from receipt of required materials). You will be provided with incremental results along the way, and a final report at the close of the project.





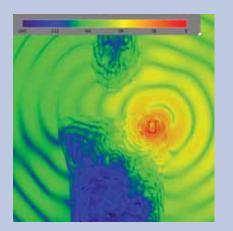
Learn more about Remcom Consulting or request a consultation at <a href="https://www.remcom.com/consulting">www.remcom.com/consulting</a>



#### Consulting Project Examples

We offer consulting across all electromagnetic applications, from bio-medical to antenna analysis. Please visit **www.remcom.com/consulting-examples** to read examples of past consulting projects, including:

- On-Platform Antenna Analysis and Optimal Placement
- SAR Analysis of Implantable Medical Device
- Proof of Concept Experimental Design Analysis
- EM Analysis of a Therapeutic Device



Remcom has been leading the EM market with innovative simulation and wireless propagation tools for 15 years. In addition to our flagship product, XFdtd, we offer a suite of innovative software and services, accessible and responsive support provided by a staff of experts, and comprehensive training. Our family of products includes:



**XFdtd**®: 3D EM simulation software package that provides engineers with powerful and innovative tools for modeling and EM software simulation.



**XStream**\*: GPU acceleration using NVIDIA's CUDA architecture dramatically speeds numerical computations.



**XGtd**®: A high frequency GTD/UTD based package for the design and analysis of antenna systems on complex objects such as vehicles and aircraft.



Wireless InSite®: A radio propagation analysis package for analyzing the impact of the physical environment on the performance of wireless communication systems.



**VariPose**®: A geometric modeling package for the manipulation and refining of high-resolution human mesh models for the medical and biomedical markets.



**Rotman Lens Designer**™: A tool for the design, synthesis, and analysis of Rotman Lenses.

Learn more about Remcom Consulting or request a consultation at www.remcom.com/consulting

Visit www.remcom.com for more information