Wayfair believes everyone should live in a home they love. Through technology and innovation, Wayfair makes it possible for customers to quickly and easily find exactly what they want from furnishings, décor, home improvement, housewares and more.

We are always looking for imaginative, analytical, and adaptable people to join our home team. You’ll find a dynamic atmosphere where learning and growth opportunities are abundant, and hard work and results are rewarded. We’re a diverse community of innovators, risk-takers, and trailblazers who know that our unique perspectives make us stronger, smarter, and well-positioned for success. Every voice, every perspective matters. We are proud to be an equal opportunity employer.

At Wayfair, you can explore your potential outside of the classroom and take the lead on high-impact projects. You’ll find autonomy, mentorship, and development opportunities in an open and collaborative environment. If you’re looking for a challenging and fulfilling career, make yourself at home.

Wayfair generated $5.7 billion in net revenue for the twelve months ended June 30, 2018. Headquartered in Boston, Massachusetts with operations throughout North America and Europe, the company employs more than 9,700 people.

Who We Are | Operations Research

Wayfair is seeking energetic, curious and action-oriented Master’s, and PhD students with an interest in a career in Operations Research for full-time and internship positions. Our current team members have a diverse skill sets across quantitative sciences, analytics, math and engineering with a focus on logistics and supply chain. They are dedicated to solving some of the most analytically challenging problems here at Wayfair.

Wayfair hires into two core areas of the Operations Research team. Team placement is determined through the application and interview process and is dependent on a combination of interest, skills and experience, and growth potential. **When applying, please indicate your area of interest of choice. If we notice a stronger alignment for a team other than those indicated in the application, we will also consider you for that opportunity.**

Roles within Operations Research include:

1. **Operations Research Scientist**

   Our Operations Research Scientists take on complex optimization projects that have immediate impact on our operations. We seek an individual who can think through creative strategies to develop and execute solutions to keep Wayfair efficient as we scale. The successful candidate will work with our team of operations research scientists and engineers to tackle large-scale and real-time optimization problems in our supply chain and beyond, including network design, transportation & vehicle routing, warehouse & inventory management, global network optimization, and many others.
We are looking for an individual capable of thinking outside of the box about operational challenges, who wants to try new approaches and challenge traditional models – all while focusing on bringing a best-in-class experience to our global customers.

What You’ll Do | Responsibilities

- Develop production software tools
- Work cross-functionally with business stakeholders to determine requirements
- Coordinate with other engineering teams

What You’ll Need | Qualifications

- Currently enrolled in a Master’s or PhD degree program at a top-tier institution with a strong academic track record
- Currently obtaining a degree focused within either Operations Research, Applied Mathematics, Industrial Engineering, Computer Science or a related field
- Strong knowledge of linear programming and mixed-integer programming
- Experience implementing models with AMPL, R, Matlab, or similar tools
- Experience using Python, C++, Java, or similar languages
- Familiarity with data analysis

2. Operations Research Engineer

The Operations Research team at Wayfair is looking for a software engineer with knowledge of Python and a solid scientific computing or mathematics background to work with us putting our models into production. This may involve working with Python web services, Spark (via PySpark), databases, caching systems, and other technologies. Your responsibilities will include automating large-scale batch processes, maintaining and improving performance of Python/Cython/C++ code, helping define best practices for maintainable code and processes, and working with other engineering teams to define APIs and integrate systems.

What you won’t be doing is re-writing poorly implemented research code. Our team does not believe in throwing ad-hoc models “over the fence” for others to productionize and maintain. We expect the models we develop will follow good software design practices. To that end, we have an active code review process and take maintainability and quality seriously. However, we’re experts in modeling and mathematical optimization, not software engineering. That’s where you come in: we want you to use your expertise in effectively building reliable systems to expose our work for consumption by a variety of internal and external stakeholders.

What You’ll Do | Sample Projects

- Architect a system to support the optimization of delivery truck routes and schedules to support order-in-cart for large parcel deliveries from our DA’s
- Generate replenishment proposals for hundreds of thousands of products stored in the Wayfair Stocking or Castlegate programs
- Determine the selection of warehouses that will be used to fulfill small parcel orders to drive cost reduction, maintain inventory balance across our network, and increase 1- and 2-day delivery guarantees
- Allow interactive edits of Supplier Order Proposals and re-optimizing in real-time to respond to constraints and information not available during a batch run
- Generate optimal pick lists and routes for warehouse personnel as they fulfill orders, and optimal positioning of products within a warehouse
- Replace commercial optimization software that no longer fits Wayfair’s needs or scale

What You’ll Need | Qualifications

- Currently enrolled in a Master’s, or PhD degree program at a top-tier institution with a strong academic track record
- Strong mathematics background, quantitative skills, and back-end programming ability
- Familiarity with Python programming
- Familiarity with mathematical optimization techniques: linear and integer programming
- Familiarity with Statistics / Probability
- Proven ability to communicate cross-functionally

No matter the track that you take within Operations Research, you will have the opportunity to play a critical role in a growing company while also operating with a high level of executive visibility. The team is focused on creating strategic solutions that steer customer behavior, influence key decision making and quantify our impact within the e-commerce space. Our diverse and fun employees enjoy an environment of strong ownership and quick feedback from building, experimenting and iterating on high-impact work.