# Research Intern - MSR Software-Hardware Co-design

Redmond, Washington, United States

Apply	Save		
Date posted	Oct 01, 2025	Job number	1886648
Work site	3 days / week in-office	Travel	None
Role type	Individual Contributor	Profession	Research, Applied, & Data Sciences
Discipline	Applied Sciences	Employment type	Internship

#### Overview

Research Internships at Microsoft provide a dynamic environment for research careers with a network of world-class research labs led by globally-recognized scientists and engineers, who pursue innovation in a range of scientific and technical disciplines to help solve complex challenges in diverse fields, including computing, healthcare, economics, and the environment.

We are a team of experienced research scientists in Microsoft Research. Our mission is to pioneer technologies that power Al and ML workloads with unmatched performance, efficiency, and trust. We build working systems, engage with academia, publish scientific papers, publish software for the research community, and deploy cutting-edge technologies to Azure and our customers.

Are you excited by problems such as:

- understanding and improving the efficiency and security of GPU memory systems used in AI
- increasing the robustness of and trust in agentic AI systems
- redesigning the software architecture of Azure services to run on hardware accelerators
- reducing the cost of deploying and operating AI systems

If you are, then we want to work with you!

Our team has deployed research to a multitude of Microsoft businesses, including Azure AI, Azure Hardware, Azure Networking, and Windows. We have also published our research at the top systems and security academic conferences including ASPLOS, ISCA, USENIX Security, IEEE S&P, USENIX NSDI, SOSP, ACM SIGCOMM, ACM MobiSys, ACM MobiCom.

As part of a small, tight-knit team, your work will be central to our focus and attention throughout the summer and beyond. Find out more about the team at: <a href="https://www.microsoft.com/en-us/research/group/software-hardware-co-design-sharc/">https://www.microsoft.com/en-us/research/group/software-hardware-co-design-sharc/</a>. We practice open communication and respectful dialogue. We support multiple social and career building opportunities in our internship program.

We seek Research Intern candidates with technical skills and backgrounds in systems and AI. Experience with memory systems, distributed systems, operating

#### Qualifications

#### **Required Qualifications**

 Currently enrolled in a Ph.D. program in Computer Science or closely related field.

#### **Other Requirements**

- Research Interns are expected to be physically located in their manager's Microsoft worksite location for the duration of their internship.
- In addition to the qualifications below, you'll need to submit a minimum of two reference letters for this position as well as a cover letter and any relevant work or research samples. After you submit your application, a request for letters may be sent to your list of references on your behalf. Note that reference letters cannot be requested until after you have submitted your application, and furthermore, that they might not be automatically requested for all candidates. You may wish to alert your letter writers in advance, so they will be ready to submit vour letter.

systems, and/or security is a plus. The candidate will have experience working on large-scale systems in addition to being fluent in the relevant state-of-the-art research. The candidate should be a team player in a collaborative and supportive environment with outstanding programming skills. The Research Internship will require fast-paced execution and implementation on Azure platforms. Applicants should demonstrate depth of knowledge and demonstrate experience in experimentation, implementation, and evaluation.

## Responsibilities

Research Interns put inquiry and theory into practice. Alongside fellow doctoral candidates and some of the world's best researchers, Research Interns learn, collaborate, and network for life. Research Interns not only advance their own careers, but they also contribute to exciting research and development strides. During the 12-week internship, Research Interns are paired with mentors and expected to collaborate with other Research Interns and researchers, present findings, and contribute to the vibrant life of the community. Research internships are available in all areas of research, and are offered year-round, though they typically begin in the summer.

#### **Preferred Qualifications**

 Experience building research or engineering systems in systems, AI, security, as demonstrated through university projects and/or prior industry experience

The base pay range for this internship is USD \$6,710 - \$13,270 per month. There is a different range applicable to specific work locations, within the San Francisco Bay area and New York City metropolitan area, and the base pay range for this role in those locations is USD \$8,760 - \$14,360 per month.

Certain roles may be eligible for benefits and other compensation. Find additional benefits and pay information here: https://careers.microsoft.com/us/en/u intern-pay

Microsoft accepts applications and processes offers for these roles on an ongoing basis throughout the academic calendar (September - April).

Benefits/perks listed below may vary depending on the nature of your employment with Microsoft and the country where you work.

Use Industry leading healthcare

Discounts on products and services

A Maternity and paternity leave

○ Giving programs

Savings and investments

Generous time away

R Opportunities to network and connect

Microsoft is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, citizenship, color, family or medical care leave, gender identity or expression, genetic information, immigration status, marital status, medical condition, national origin, physical or mental disability, political affiliation, protected veteran or military status, race, ethnicity, religion, sex (including pregnancy), sexual orientation, or any other characteristic protected by applicable local laws, regulations and ordinances. If you need assistance and/or a reasonable accommodation due to a disability during the application process, read more about requesting accommodations.

Apply

https://jobs.careers.microsoft.com/global/en/job/1886648/Research-Intern---MSR-Software-Hardware-Co-design

## **Software Engineer Internship Opportunities**

Prague, Czech Republic

Date posted Oct 14, 2025 Job number 1877056

Work site 3 days / week in-office Travel None

Role type Individual Contributor Profession Software Engineering

Discipline Software Engineering Employment type Internship

#### Overview

**Program Start Date: July 2026** 

**Program Duration: 12 Weeks, Full Time** 

**Location: Prague** 

Come build community, explore your passions and do your best work at Microsoft with thousands of University interns from every corner of the world. This opportunity will allow you to bring your aspirations, talent, potential—and excitement for the journey ahead.

As a Software Engineering Intern, you will work with teammates to solve problems and build innovative software solutions. You will apply your passion for customers and product quality as you provide technical guidance to Technical Program Managers and Product Managers. You will learn and adopt relevant new technologies, tools, methods, and processes to leverage in your solutions. This opportunity will enable you to advance your career by designing, developing, and testing next-generation software that will empower every person and organization on the planet to achieve more.

At Microsoft, Interns work on real-world projects in collaboration with teams across the world, while having fun along the way. You'll be empowered to build community, explore your passions and achieve your goals. This is your chance to bring your solutions and ideas to life while working on cutting-edge technology.

Microsoft's mission is to empower every person and every organization on the planet to achieve more. As employees we come together with a growth mindset, innovate to empower others, and collaborate to realize our shared goals. Each day we build on our values of respect, integrity, and accountability to create a culture of inclusion where everyone can thrive at work and beyond.

#### Responsibilities

#### **Qualifications**

#### **Required Qualifications:**

- Currently pursuing Bachelor's or Master's degree in Computer Science, Engineering, or related field.
- Must have at least 1 semester/term remaining following the completion of the internship.
- One year of programming experience in an objectoriented language (e.g., C#, Python, Java, C++, JavaScript, etc.).
- You must be legally authorised to work in Czech Republic to be eligible for this role. (Legally authorised = has citizenship or has been granted a valid visa or work permit).
- Fluency in English.

#### **Preferred Qualifications:**

- Ability to demonstrate an understanding of computer science fundamentals, including data structures and algorithms.
- Excellent communication skills and ability to work effectively in a team environment.

- Apply engineering principles to solve complex problems through sound and creative engineering.
- Work with appropriate stakeholders to determine user requirements for a feature
- Quickly learns new engineering methods and incorporates them into work processes.
- Seek feedback and apply internal or industry best practices to improve technical solutions.
- Demonstrate skill in time management and completing software projects in a cooperative team environment.
- Review current developments and proactively seek new knowledge that will improve the availability, reliability, efficiency, observability, and performance of products while also driving consistency in monitoring and operations at scale.

- Exposure to cloud platforms.
- Interest in identity, authentication, and security technologies OR
- Interest in integrating AI/ML into productivity tools.

Benefits/perks listed below may vary depending on the nature of your employment with Microsoft and the country where you work.

Undustry leading healthcare

Discounts on products and services

<sup>2</sup> Maternity and paternity leave

Savings and investments

Generous time away

Sportunities to network and connect

Microsoft is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, citizenship, color, family or medical care leave, gender identity or expression, genetic information, immigration status, marital status, medical condition, national origin, physical or mental disability, political affiliation, protected veteran or military status, race, ethnicity, religion, sex (including pregnancy), sexual orientation, or any other characteristic protected by applicable local laws, regulations and ordinances. If you need assistance and/or a reasonable accommodation due to a disability during the application process, read more about requesting accommodations.

Apply

# **Software Engineer**

Prague, Czech Republic

Apply
-------





Date posted Oct 20, 2025 Job number 1884364

Work site 3 days / week in-office Travel 0-25 %

Role type Individual Contributor Profession Software Engineering

Discipline Software Engineering Employment type Full-Time

#### Overview

Are you passionate about building and launching products focused on social impact?

We are seeking a high-energy software engineer to accelerate nonprofit solution innovation and join one of Microsoft's fastest-growing industry solutions teams.

Microsoft's Tech for Social Impact (TSI) launched in 2017 and delivers technology to over 400,000 nonprofits and UN agencies worldwide. TSI is mission-driven and balances its social impact work with the need to maintain a sustainable business model for how Microsoft scales digital transformation across the global nonprofit sector.

The Nonprofit Solutions team sets the pace across Microsoft for rapidly developing nonprofit technology solutions anchored to the Common Data Model for Nonprofits. These solutions leverage Microsoft Business Applications, Azure, and Modern Work platform capabilities. We are seeking a software engineer who will be responsible for developing new solutions on top of these platforms to accelerate innovations within nonprofit organizations around the world.

Success in this role means partnering with the Tech for Social Impact Sales, Partner, and other cross-organizational teams within Microsoft to support the customer and partner sales and implementation processes. The ideal candidate should have a strong technical aptitude to gain a deep understanding of the Microsoft Cloud for Nonprofit (MC4N) technology, knowledge of sales and implementation processes involving partners and customers, and a focus on continuous improvement and customer/partner satisfaction. Strong communication, problem-solving, and decision-making skills are crucial for success in this role.

## Responsibilities

### **Qualifications**

#### Qualifications

# Required/Minimum Qualifications

- Bachelor's Degree in Computer Science or related technical field AND technical engineering experience with coding in languages including, but not limited to, C, C++, C#, Java, JavaScript, or Python
  - OR equivalen experienc
- Proven experience in .NET development (C#, ASP.NET).
- Hands-on experience with Microsoft Azure services and architectures.
- Strong problem-solving abilities and the ability to engage with business stakeholders to understand requirements and deliver solutions.
- Experience in software development tools such as Azure DevOps.

# Additional or Preferred Qualifications

#### Responsibilities

### **Understand User Requirements**

- Engage with nonprofit business stakeholders to gather and analyze business requirements.
- Design and propose technical solutions that align with Microsoft standards and business objectives.
- Develop, implement, and deploy nonprofit solutions using .NET and Azure technologies.
- Ensure all solutions meet compliance requirements and are delivered to production environments smoothly.
- Partner with cross-functional teams, including sales, partner, and technical teams, to support nonprofit customer solutions.
- Provide support for existing customers/solutions during business hours only.
- Contribute to the continuous improvement of solution security and quality.
- Create and maintain documentation related to our solutions and best practices.

 Bachelor's Degree in Computer Science or related technical field AND technical engineering experience with coding in languages including, but not limited to, C, C++, C#, Java, JavaScript, or Python

> o OR Master's Degree in Compute Science or related technical field AND technical engineeri experienc with coding in language including, but not limited to, C, C++, C#, Java, **JavaScript** or Python o OR

> > equivalen

- Experience with Microsoft Power Platform (Power BI, Power Apps, Power Automate).
- Familiarity with Modern Work technologies such as Microsoft Copilot.
- Experience with Microsoft Fabric.
- Previous experience with nonprofit sector solutions or projects.
- Strong communication skills with technical and nontechnical audiences.

Benefits/perks listed below may vary depending on the nature of your employment with Microsoft and the country where you
work.

Undustry leading healthcare

Discounts on products and services

<sup>2</sup> Maternity and paternity leave

Savings and investments

Generous time away

R Opportunities to network and connect

Microsoft is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, citizenship, color, family or medical care leave, gender identity or expression, genetic information, immigration status, marital status, medical condition, national origin, physical or mental disability, political affiliation, protected veteran or military status, race, ethnicity, religion, sex (including pregnancy), sexual orientation, or any other characteristic protected by applicable local laws, regulations and ordinances. If you need assistance and/or a reasonable accommodation due to a disability during the application process, read more about requesting accommodations.

Apply

https://jobs.careers.microsoft.com/global/en/job/1884364/Software-Engineer