

## How to Create a Resume in 2025

Your resume is a dynamic marketing tool that needs to work both for human readers and Applicant Tracking Systems (ATS).

Here's how to optimize it for today's job market:

### Format and Structure

- Choose an ATS-friendly format that's also visually appealing for human readers.
- Keep the design clean and minimal - avoid complex templates, graphics, or columns that can confuse ATS systems.
- Aim for 2 pages maximum for industry roles.
- Lead with an executive summary highlighting technical expertise and business impact.
- Consider separate versions for different company types (large pharma vs. early-stage biotech).
- Use clear section headers that align with job posting terminology.

### Technical Considerations

- Use modern, professional fonts like Helvetica, Arial, Garamond, or Calibri.
- Use periods after each bullet, or don't! Just be consistent throughout the resume.
- Ensure your resume is mobile-responsive as many recruiters review on phones/tablets.
- Save in both PDF and plain text formats for different application systems.

### Contact and Professional Information

- Simple – Name, email, and cell phone at top of resume.
- Include a professional personal email (avoid institutional emails).
- Add your preferred pronouns if you're comfortable sharing them.
- Include your LinkedIn URL with a professional photo and updated profile.
- Add your GitHub profile if you have significant computational work.
- Remove physical address unless specifically required.
- Include relevant professional society memberships (ISPE, PDA, etc).

### Professional Experience

List positions in reverse chronological order, starting with current role.

For each position, include:

- Full title, institution/organization, location
- Dates of employment (month/year to month/year)
- 4-5 key technical responsibilities highlighting expertise

- 2-3 quantifiable business or research accomplishments
- Relevant technical achievements and innovations

Use appropriate tense:

- Use present tense for current position
- Use past tense for previous positions

Begin each bullet point with strong research-focused action verbs:

- Technical Impact: Engineered, Developed, Optimized, Validated
- Business Impact: Streamlined, Reduced, Accelerated, Improved
- Leadership: Led, Managed, Supervised, Mentored
- Cross-functional: Collaborated, Partnered, Aligned, Integrated
- Project Management: Delivered, Executed, Coordinated, Implemented

### **Scientific Impact Metrics**

- Industry collaborations.
- Include h-index and total citations if strong.
- Note any patents or technology transfers.
- Team size managed, budget responsibility.
- Quantify research outcomes (e.g., "Developed assay that reduced processing time by 40%").
- Timeline reductions and cost savings generated.
- Project delivery metrics and cross-functional influence.

### **Digital Scientific Presence**

- LinkedIn: Comprehensive profile with industry connections
- Patents: Numbers and information
- GitHub: If relevant for computational work
- Professional Society Memberships
- Industry Certifications
- Include h-index and key publications (and/or hyperlink to google scholar)

### **Industry-Specific Skills**

Highlight experience in:

- GMP and quality systems
- Regulatory requirements
- Scale-up and manufacturing
- Automation and high-throughput systems

- Project management methodologies
- Risk assessment and mitigation
- Vendor/CRO management
- Technology transfer

## **Publications and Technical Achievements**

Prioritize in this order:

- Patents and patent applications
- Technical achievements (products, platforms, processes)
- Key peer-reviewed publications (if relevant to position)
- Conference presentations at industry meetings
- Technical reports and white papers

## **Submission and Review Process**

- Test through ATS simulation tools.
- Use AI tools to check for technical terminology consistency.
- Have industry peers review.
- Test all digital links – LinkedIn, GitHub, etc.
- Ensure your experience includes standard industry language (key words).
- Save in multiple formats (PDF, .docx, plain text).
- Ensure readability in both dark and light modes.
- Maintain a master document for easy customization.

## **Key 2025 Trends**

- Focus on computational and data science skills.
- Importance of interdisciplinary collaboration.
- Value placed on science communication abilities.
- Growing significance of research reproducibility.
- Rising importance of AI/ML familiarity in research.

Example of Resume Setup from Claude.ai (fictitious protein engineer) follows below:

**SARAH J. CHEN, Ph.D.**

Boston, MA | s.chen@email.com | (555) 123-4567  
linkedin.com/in/xxxxx | ORCID: 0000-XXXX-XXXX-XXXX

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**PROFESSIONAL SUMMARY**

Protein engineering scientist with 8 years of experience in directed evolution and rational design of therapeutic proteins. Expertise in high-throughput screening and computational protein design, resulting in 3 candidates advancing to clinical trials. Strong track record of leading cross-functional teams and implementing novel protein optimization platforms.

**TECHNICAL EXPERTISE**

Protein Engineering: Directed evolution, rational design, protein library generation, yeast/phage display  
Molecular Biology: Site-directed mutagenesis, Gibson assembly, Golden Gate cloning, PCR optimization  
Protein Analytics: CD spectroscopy, DSC/DSF, SEC-MALS, SPR, BLI, HDX-MS, protein crystallography  
Expression Systems: E. coli, CHO, HEK293, Pichia pastoris, cell-free systems  
Computational: PyMOL, Rosetta, AlphaFold2, molecular dynamics simulations, Python scripting  
High-throughput Methods: FACS, automated liquid handling, multiplexed binding assays  
Project Management: Benchling, Microsoft Project, Jira, Electronic Lab Notebooks

**PROFESSIONAL EXPERIENCE**

**Senior Scientist, Protein Engineering | Novartis Institutes for Biomedical Research | Cambridge, MA**  
January 2021 - Present

**Research Leadership & Technical Contributions:**

- Lead protein engineering team of 6 scientists, advancing novel bispecific antibody platform from concept to IND-enabling studies
- Develop machine learning algorithms for protein stability prediction, improving successful mutation prediction rate by 60%
- Design and implement automated screening workflow for protein thermal stability assessment
- Manage collaboration with computational biology team for in silico protein design and optimization

**Key Achievements:**

- Engineered novel antibody format with 10-fold improved stability and maintained binding affinity
- Filed 2 patents for protein engineering platform technology
- Established automated high-throughput protein characterization pipeline, reducing screening time by 75%

**Scientist II, Protein Sciences | Genentech | South San Francisco, CA**

March 2018 - December 2020

- Spearheaded development of novel Fc engineering platform, achieving 5-fold improvement in FcRn binding.
- Optimized multi-parameter protein evolution strategy, increasing success rate of engineered variants by 40%.
- Implemented new protein stability characterization workflow, reducing attrition rate of lead candidates by 30%.
- Mentored 2 research associates and 1 graduate intern.

**Scientist I | Amgen | Cambridge, MA**

June 2015 - February 2018

- Developed yeast display platform for engineering protease-resistant peptide therapeutics
- Contributed to successful IND submission for engineered protein therapeutic
- Established automated protein purification protocols using ÄKTA systems

**EDUCATION**

Ph.D. in Biochemistry | MIT | 2015

Thesis: "Computational Design and Experimental Validation of Stable Protein-Protein Interfaces"

Technical Focus: Protein design, structural biology, computational modeling

B.S. in Chemical Engineering | UC Berkeley | 2010

Honors Thesis: "Engineering Enzymes for Non-Natural Amino Acid Incorporation"

**PUBLICATIONS & PATENTS**

- Chen SJ, et al. (2023). "Machine learning-guided protein engineering enables rapid optimization of biotherapeutics." *Nature Biotechnology*, 41(2), 234-241.
- Patent US11,542,345: "Novel bispecific antibody format with enhanced stability" (2023)
- Patent US11,235,678: "Methods for high-throughput protein engineering" (2022)

**PROFESSIONAL DEVELOPMENT**

- Advanced Protein Engineering Course - EMBL Hamburg (2023)
- AWS Machine Learning for Computational Biology Certification (2022)
- Project Management for Scientists - NIBR Leadership Program (2021)

**AWARDS & RECOGNITION**

- Novartis Leading Science Award (2023)
- Best Publication in Protein Engineering - Company Recognition (2022)
- Outstanding Mentor Award - Genentech (2019)

**References available upon request**