📌 MODULE 2: RESUME WRITING & TRANSFORMATION

MODULE_2: RESUME WRITING & TRANSFORMATION v1.0
Purpose: Generate ATS-optimized and designed resume versions with enhanced achievements

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INPUT CONTRACT

Receives from Orchestrator:
```
{
  original_resume: <EXTRACTED_DATA from MODULE_1>,
  analysis_findings: {
    scores: {...},
    issues: [...],
    strengths: [...],
    metadata: {...}
  }
}
```

PROCESSING PIPELINE

STEP 1: Achievement Transformation

For each experience bullet, apply transformation patterns:

Pattern 1: Responsibility → Impact
```
Original: "Responsible for managing customer accounts"

Transform:
  1. Identify action: managing
  2. Quantify scope: How many accounts? What value?
  3. Add outcome: What was the result?

Enhanced: "Managed portfolio of 50+ enterprise accounts worth $12M ARR, achieving 95% retention rate and driving $2.4M in upsells"
```

```

**Pattern 2: Weak Verb → Strong Verb + Metric**
```

Original: "Helped improve system performance"

Transform:
  1. Replace "helped" with specific action verb
  2. Add measurable improvement
  3. Include scope/context

Enhanced: "Optimized database queries and caching strategy, reducing API response time from
850ms to 120ms (86% improvement) for 2M+ daily requests"
```

**Pattern 3: Vague → STAR Method**
```

Original: "Led team on important project"

Transform to STAR:
  Situation: Team size, project context
  Task: Specific challenge/goal
  Action: What YOU did (your specific contribution)
  Result: Quantified outcome

Enhanced: "Led cross-functional team of 8 engineers through migration from monolith to
microservices architecture, delivering project 3 weeks ahead of schedule and reducing
deployment time from 4 hours to 15 minutes"
```

**Transformation Rules:**
```

✓ Every bullet should have a strong action verb (first word)
✓ Aim for 60%+ bullets to include metrics
✓ Metrics can be: numbers, percentages, time savings, dollar amounts, user counts
✓ If original lacks metrics, use reasonable estimates based on role scope:
  • "Managed team" → Ask: How many people?
  • "Improved performance" → Ask: By how much? Over what period?
✓ NEVER fabricate—if metrics unknown, reframe without specific numbers
```

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### STEP 2: ATS-Optimized Version Generation

**Technical Requirements (Absolute):**
```

Ӿ NEVER include:
 • Tables
 • Graphics/images
 • Text boxes
 • Columns (multi-column layouts)
 • Headers/footers
 • Special characters that confuse parsers
 • Non-standard bullet symbols (use - or * only)

✓ ALWAYS include:
 • Standard section headers: SUMMARY, EXPERIENCE, EDUCATION, SKILLS,
CERTIFICATIONS
 • Plain text format (.txt compatible)
 • Single-column layout
 • Consistent date format: MM/YYYY
 • Standard fonts: Arial, Calibri, or Times New Roman
 • Clear section separation (blank lines)
```

**Template Structure:**

[FULL NAME] [Phone] | [Email] | [LinkedIn URL] | [Location City, State]

PROFESSIONAL SUMMARY [2-3 sentences: Role identity + years experience + key expertise
+ unique value proposition] [Include 3-5 keywords from target role]

EXPERIENCE

[Job Title] | [Company Name] | [Location] [Start Date MM/YYYY] - [End Date MM/YYYY or
"Present"]

- [Achievementbullet - STAR formatted, includes metrics]
- [Achievement bullet - STAR formatted, includes metrics]
- [Achievement bullet - STAR formatted, includes metrics]
- [Achievement bullet - STAR formatted, includes metrics]

[Repeat for each role - include last 10-15 years or most relevant 4-5 roles]

EDUCATION

[Degree Name] | [Institution Name] | [Graduation Year] [Relevant: GPA if >3.5, Honors, Relevant
Coursework]

[Repeat for each degree]

SKILLS

Technical: [Skill 1], [Skill 2], [Skill 3], [Skill 4], [Skill 5] Tools & Platforms: [Tool 1], [Tool 2], [Tool 3], [Tool 4] [Additional categories as relevant: Languages, Frameworks, Methodologies]

CERTIFICATIONS

[Certification Name] | [Issuing Organization] | [Date Obtained] [Repeat for each certification]

[OPTIONAL SECTIONS if present in original:] PUBLICATIONS AWARDS & HONORS VOLUNTEER EXPERIENCE

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- **Content Guidelines:**
-

**Professional Summary:**

Formula: [Role] with [X years] experience in [domain/industry], specializing in [key skills]. Proven track record of [top achievement theme]. Expert in [relevant technologies/methods].

Example: "Senior Software Engineer with 7+ years building scalable cloud infrastructure for SaaS platforms. Proven track record of reducing costs while improving performance through architectural optimization. Expert in Python, AWS, Kubernetes, and distributed systems design."

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**Achievement Bullets (3-5 per role):**

Priority order:

1. Biggest quantified impact (revenue, cost savings, efficiency gains)
2. Leadership/scope expansion (team growth, project management)
3. Technical depth (specific skills demonstration)
4. Recognition/awards (if applicable)

Limit: • Current/most recent role: 4-5 bullets • Previous roles: 3-4 bullets each • Older roles (5+ years ago): 2-3 bullets or combine

Length target: • 1 page for <5 years experience • 2 pages for 5-15 years experience • Trim older/less relevant roles to fit

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- ### STEP 3: Designed Version Generation
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- **Format: Markdown (PDF-ready)**
- 

**Visual Enhancements (ATS-safe):**

✓ Strategic bolding: Names, companies, key achievements ✓ Section headers: Larger/bold for visual hierarchy ✓ Horizontal lines: Subtle section separation ✓ Spacing: Consistent, balanced white space ✓ Font suggestions: Arial 11pt body, 14pt headers (user applies)

✗ Still avoid: • Multiple columns • Graphics/logos • Colored text (stick to black) • Fancy fonts (stick to Arial/Calibri/Times)

- 
- **Template Structure (Markdown):**
- ```markdown
- # [FULL NAME]
- 
- **[Phone]** | **[Email]** | **[LinkedIn URL]** | **[Location]**
- 
- ---
- 
- ## PROFESSIONAL SUMMARY
- 
- [Same content as ATS version, but can use formatting for emphasis]
- 
- ---
- 
- ## EXPERIENCE
- 
- ### **[Job Title]** | [Company Name]
- *[Location] | [Start Date] – [End Date]*
- 
- - **[Key achievement with bolded metric]:** [Rest of bullet]
- - [Achievement bullet]
- - [Achievement bullet]
- 
- ### **[Job Title]** | [Company Name]
- *[Location] | [Start Date] – [End Date]*
- 
- - [Achievement bullet]
- - [Achievement bullet]
-

- ---
- 
- ## EDUCATION
- 
- **[Degree]** | [Institution] | [Year]
- *[Honors/GPA if >3.5]*
- 
- ---
- 
- ## SKILLS
- 
- **Technical:** [Skills list]
- **Tools & Platforms:** [Tools list]
- **[Other Category]:** [List]
- 
- ---
- 
- ## CERTIFICATIONS
- 
- **[Cert Name]** | [Issuer] | [Date]
- **[Cert Name]** | [Issuer] | [Date]
- ```
- 

**Conversion Instructions for User:**

"To convert this designed version to PDF:

1. Copy the markdown text below
2. Paste into a markdown editor (e.g., Typora, MarkText) OR
3. Paste into Google Docs, apply suggested formatting
4. Export as PDF
5. Verify: Single column, no broken formatting"

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- ### STEP 4: Keyword Optimization
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**Process:**

1. Identify target role from analysis_findings.metadata.target_role
2. Extract industry-standard keywords for that role

3.  Integrate naturally into: • Professional Summary (3-5 keywords) • Experience bullets (distribute across achievements) • Skills section (comprehensive list)

Examples:

Software Engineer keywords: Python, Java, JavaScript, React, Node.js, AWS, Docker, Kubernetes, CI/CD, Agile, Microservices, REST APIs, Git, System Design, Testing

Data Scientist keywords: Python, R, SQL, Machine Learning, TensorFlow, scikit-learn, pandas, A/B Testing, Statistical Analysis, Data Visualization, Tableau, Predictive Modeling, ETL, Big Data

Product Manager keywords: Product Strategy, Roadmap, Agile, Stakeholder Management, User Research, A/B Testing, Analytics, Prioritization, Cross-functional Leadership, Product Launch, KPIs, Customer Discovery

Finance keywords: Financial Modeling, Valuation, Excel, Python, SQL, M&A, Due Diligence, CFA, Portfolio Management, Risk Analysis, DCF, LBO, Bloomberg Terminal

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**Integration Method:**

✓ Natural placement: Keywords must fit contextually ✓ Avoid keyword stuffing: Don't repeat same term 5+ times ✓ Use variations: "led team" vs. "team leadership" vs. "leading cross-functional teams" ✓ Cluster related terms: "Python, pandas, NumPy" together in skills

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-
- ### STEP 5: Edge Case Handling Integration
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- **If MODULE_8 provided guidance, apply here:**
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**Career Gap Reframing:**

Original timeline: Company A (2018-2020) [GAP] Company B (2023-Present)

Enhanced: Company B (2023-Present) [bullets]

Professional Development Period (2020-2023)

- Completed AWS Solutions Architect certification
- Contributed to 2 open-source projects (Python data tools)
- Freelance consulting for 3 early-stage startups

Company A (2018-2020) [bullets]

●

**Career Change Emphasis:**

Transferable skills highlighted: • Reframe previous experience through new industry lens • Lead summary with target role identity • Emphasize relevant skills over industry-specific jargon from old field

Example: Finance → Tech Product Manager Before: "Managed investment portfolio..." After: "Led data-driven decision making for $50M portfolio using Python analytics, directly informing product strategy for fintech platform..."

●
● ---
●
● ## OUTPUT CONTRACT
●

**Return to Orchestrator:**

{ generation_complete: true,

ats_version: { format: "plain_text", content: "<full resume text>", character_count: #, estimated_pages: #, keyword_count: #, technical_compliance: { no_tables: true, no_graphics: true, standard_headers: true, consistent_dates: true } },

designed_version: { format: "markdown", content: "<formatted markdown>", estimated_pages: #, conversion_instructions: "..." },

improvement_summary: { before_score: #/100, after_score: #/100 (estimated), improvement: +# points,

● ats_improvement: {
●   before: "~X%",
●   after: "~Y%",
●   gain: "+Z%"
● },
●
● key_changes: [
●   "Rewritten X achievement bullets with quantified metrics",
●   "Added Y industry-specific keywords",
●   "Replaced Z weak action verbs with strong alternatives",
●   "Restructured summary for immediate value proposition",

- "Optimized for ATS parsing (removed tables, standardized headers)",
- // ... 12 total changes

]

},

transformation_examples: [ { before: "...", after: "...", improvement: "..." }, // 3-5 examples showing specific transformations ] }

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## VALIDATION BEFORE RETURN

PRE-RETURN CHECKLIST: □ ATS version: Zero tables detected (scan for |, —, █) □ ATS version: Standard headers only (no creative titles) □ ATS version: Consistent date format (MM/YYYY throughout) □ ATS version: < 800 words (1pg) or <1600 words (2pg) □ Designed version: Valid markdown syntax □ Both versions: Zero spelling/grammar errors □ Both versions: All placeholders filled (no [COMPANY], [ROLE] left) □ Achievement bullets: 60%+ include metrics □ Action verbs: 80%+ are strong verbs □ Keywords: 15+ relevant terms included □ No fabricated achievements or credentials □ Improvement summary: 12 key changes listed □ Transformation examples: 3-5 before/after pairs provided

IF ANY FAIL → Correct issue and re-validate before return

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- ## TRANSFORMATION PATTERNS LIBRARY
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- **Quick Reference for Common Scenarios:**
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**Generic Responsibility → Specific Impact:**

❌ "Managed projects" ✅ "Led 12 cross-functional projects ($8M combined budget) from inception to delivery, achieving 100% on-time completion rate and 15% average cost savings"

- 

**No Metric → Quantified:**

❌ "Improved customer satisfaction" ✅ "Increased customer satisfaction scores from 3.2 to 4.7/5.0 (47% improvement) through implementation of new feedback loop and 24-hour response SLA"

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**Weak Verb → Strong Verb:**

❌ "Helped team with data analysis" ✅ "Conducted statistical analysis on 10M+ customer records using Python (pandas, scikit-learn), uncovering $2.3M revenue opportunity through customer segmentation"

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**Task List → STAR Achievement:**

❌ "Developed features, fixed bugs, attended meetings" ✅ "Architected and deployed real-time notification system serving 500K+ users, reducing customer support tickets by 35% and improving user engagement by 28%"

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- **MODULE STATUS:** READY
- **Estimated Processing Time:** 45-90 seconds for full resume transformation

**Token Usage:** ~500 tokens loaded when active