L² LaunchToLead

Resume Analysis & Rewrite

Steven De Alwis — Mechanical Engineer / MBA Candidate

Analyzed against the Impact Bullet Builder™ framework

Overall Score

35

out of 100

0 — Invisible | 50 — Achiever | 100 — Impact Standard

4/10 Accomplishments — Some hints, mostly duties	**1/10** Metrics — Zero quantification
7/10 How / Method — Tools well-integrated	**1/10** Why / Business Impact — No "so what" anywhere

Verdict: "The Achiever" Tier — Low End — Has the Experience, Missing the Communication

This resume has **significantly more substance** than a typical new grad — 6+ years of industry experience at BP, Continental, Danfoss, and Hormel, plus published research and serious certifications (API 579, Six Sigma). But it reads like a series of job descriptions. Every bullet tells you WHAT Steven did without ever telling you WHY it mattered. At BP — a refinery with $billions in assets and massive safety stakes — every bullet should practically write its own Dragon Slayer context. That potential is completely untapped.

Key Issues Identified

1 Zero quantified metrics across the entire resume

6+ years of engineering experience and not a single percentage, dollar amount, time savings, or count. No "reduced downtime by X%," no "$Y saved," no "Z units processed." The Impact Bullet Builder requires a **Metric** in every single bullet. Steven has data-rich work at a refinery — outage durations, equipment counts, incident rates, project budgets — all missing.

2 Massive Dragon Slayer potential completely wasted at BP

Steven works in **Process Safety Management at a BP refinery**. The stakes are literal life-and-death, $billions in assets, EPA/OSHA compliance. Every bullet about LOPA, RCA, start-ups after incidents, and outage planning has inherent drama — but none of it is leveraged. Per the Dragon Slayer technique: paint the problem first. "Led system start-up following [X — an incident that caused $Y in downtime?]" is infinitely more powerful than "Led system start-ups following outages."

3 "Worked with" and "Oversaw" hide personal contribution

"Worked with suppliers and BP planning group in defining multi period inventory models" — what did **Steven** specifically do? Did he build the model? Run the analysis? Present the recommendation? "Oversaw contractor execution" — did he manage 5 contractors or 50? Did he catch issues? Per the **Me-in-We Extractor™**: replace vague team language with your specific contribution.

4 "Defined" appears 3 times — verb repetition signals low effort

"Defined utilities outage worklist," "Defined financial and process safety risks," "Defined code compliant quality control requirements." Repeating the same verb signals copy-paste and kills variety. The Impact Bullet Builder demands strong, varied action verbs. Replace with: Architected, Quantified, Established, Structured.

5 Continental + Hormel + internship bullets are one-liners with zero substance

"Oversaw testing of thermoplastic hose assemblies." "Audited assemblies and updated manufacturing BOMs in SolidWorks." These are single-task descriptions with no metrics, no context, and no impact. They're Doer-tier. Either expand them with the full formula or consolidate positions where there isn't enough substance to justify multiple bullets.

6 Summary is a generic LinkedIn headline, not a value proposition

"Mechanical Engineer pursuing an MBA in Finance and Business Analytics, bringing 6+ years of technical project management experience" — this tells the reader your title and tenure, not your value. A powerful summary leads with your biggest measurable win: "Process Safety Engineer who [X — biggest quantified accomplishment]." The current summary could belong to anyone with Steven's job title.

7 Published research papers are buried and not leveraged

Steven has **two peer-reviewed publications** in nanotechnology — that's rare for someone outside academia. But they sit at the bottom of the resume with zero connection to his experience bullets. The research experience bullets also read as duty descriptions: "Led literature reviews, experimental planning" — with no outcomes. Did the novel graphene method get published? Did it advance the field? Tie outcomes to the work.

8 Skills section is a flat list with vague categories

"Leadership & Strategy: Change Management, Project Management, Risk Management" — these are buzzwords, not skills shown in context. The Impact Bullet Builder says: show skills IN the bullets. "Built Power BI dashboards" is already in the experience section — that's great. But putting "Power BI" separately in skills too is redundant. The skills section should add context, not repeat.

Rewritten Resume — Impact Bullet Builder™ Applied

[X] = placeholder where Steven needs to provide missing information (metrics, specifics, or context we can't know from the outside)

Steven De Alwis

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SUMMARY

REWRITTEN

Process Safety & Mechanical Engineer with 6+ years driving risk reduction and reliability improvements across refinery operations, new product development, and plant maintenance. Led **[X — how many?]** outage recoveries and LOPA studies at BP's Whiting refinery — **[X — biggest quantified win, e.g., "reducing incident follow-up time by X%"]**. Six Sigma Green Belt and API 579/571 certified. Published researcher with 2 peer-reviewed papers. Currently pursuing MBA in Finance & Business Analytics (3.94 GPA).

EDUCATION

MBA, Finance & Business Analytics 3.94 GPA — Expected May 2027
University of Iowa, Iowa City, IA

M.S. Mechanical Engineering | B.S. Mechanical Engineering 3.78 GPA
Iowa State University, Ames, IA — Graduate Certificate in Human Computer Interaction

CERTIFICATIONS

Google Project Management Professional | API 579-1/ASME FFS-1 Fitness-for-Service | API 571 Damage Mechanisms | Six Sigma Green Belt (ID: 4496815)

PROFESSIONAL EXPERIENCE

Process Safety Management Engineer

Aug 2024 – Present

British Petroleum (BP), Whiting, IN

- REWRITTEN Led **[X — how many?]** system and unit start-ups following outages, repairs, and post-incident recoveries at BP's **[X — asset size? e.g., 435,000 bbl/day]** refinery — restoring operations within **[X]** hours of target and preventing **$[X]** in extended downtime losses on units where unplanned shutdowns cost an estimated **$[X]/hour**.
- REWRITTEN Conducted **[X — how many?]** Layer of Protection Analysis (LOPA) studies on potential equipment failure scenarios, identifying **[X]** high-risk gaps and defining **[X]** engineered safeguards — reducing residual risk to tolerable levels on equipment valued at **$[X]M** and ensuring compliance with OSHA PSM 1910.119.
- REWRITTEN Quantified financial and process safety risks using quantitative risk analysis across **[X]** scenarios, translating technical failure modes into **$[X]M** risk-weighted exposure values — enabling leadership to prioritize capital allocation toward the **[X]** highest-risk mitigations first.
- REWRITTEN Built **[X — how many?]** Power BI dashboards tracking project milestones and PSM compliance across **[X]** active work orders — replacing **[X — manual spreadsheet tracking?]** and reducing status reporting time from **[X]** hours/week to **[X]** minutes, giving operations leadership real-time visibility into outage readiness.
- REWRITTEN Performed Root Cause Analysis (RCA) on **[X]** process safety and reliability incidents, identifying **[X]** systemic failure patterns and implementing corrective actions that **[X — reduced recurrence by X%? prevented X repeat incidents?]** — protecting personnel safety and avoiding **$[X]** in potential regulatory penalties.
- REWRITTEN Approved quality control reports on NDT inspections (welds, pressure tests, torquing) across **[X]** work packages, maintaining **[X]%** first-pass acceptance rate — ensuring code-compliant repairs on pressure-boundary equipment where failures could trigger **[X — EPA/OSHA action? catastrophic release?]**.

Mechanical Engineer

Jan 2023 – Aug 2024

British Petroleum (BP), Whiting, IN

- REWRITTEN Architected the utilities outage worklist for **[X — how many?]** planned outages, preparing **[X]** repair packages with code-compliant QC requirements — delivering **[X]%** of work packages on schedule and under budget, across outages valued at **$[X]M** total.
- REWRITTEN Managed **[X — how many?]** contractors across **[X]** utility outages, coordinating daily execution against **[X]-day** critical-path schedules — completing **[X]%** of scopes on time and catching **[X]** quality deviations before they escalated to rework, saving an estimated **$[X]** in delay costs.
- REWRITTEN Diagnosed and resolved **[X]** electro-hydraulic failures in water treatment systems and Coking drums — reducing mean time to repair from **[X]** hours to **[X]** hours on equipment where extended downtime cost **$[X]/hour** in lost throughput.
- REWRITTEN Developed multi-period inventory models for code-compliant spare components, analyzing vendor lead times and consumption rates in SAP — reducing emergency procurement by **[X]%** and maintaining **[X]%** parts availability during **[X]** planned outages, preventing **$[X]** in expediting premiums.

Hydraulic Fittings Development Engineer

Oct 2022 – Jan 2023

Continental, Valparaiso, IN

- REWRITTEN Developed **[X]** validation test plans for hydraulic fittings to meet SAE, DIN, and ISO standards, covering **[X]** test conditions — achieving **[X]%** first-pass certification rate and accelerating time-to-market by **[X]** weeks vs. the prior process.
- CONSIDER REMOVING ~~Managed specification workflows in Salesforce for hoses and assemblies.~~

  → This is an admin task. If keeping: "Streamlined specification workflows for [X] hose and assembly SKUs in Salesforce, reducing spec-to-approval cycle time by [X]% and eliminating [X] manual handoffs."
- CONSIDER REMOVING ~~Oversaw testing of thermoplastic hose assemblies.~~

  → This is a one-liner with zero impact. If keeping: "Oversaw [X] thermoplastic hose assembly tests, identifying [X] failure modes that led to [X — design change? material substitution?] — preventing [X — field failures? warranty claims?]."

Hydraulic Development Engineer

Feb 2021 – Sep 2022

Continental, Norfolk, NE

- REWRITTEN Developed **[X]** Design Verification Plan & Reports (DVPRs) aligned with SAE, ABS, USCG, ISO, and EN standards for hydraulic hoses and fittings — achieving **[X]%** compliance-pass rate on first submission and supporting **[X]** product launches on schedule.
- REWRITTEN Improved hose production throughput by **[X]%** by identifying and eliminating **[X]** bottlenecks using **[X — Lean/Six Sigma? data analysis?]**, reducing process variability by **[X]%** — recovering **[X]** units/day of lost capacity valued at **$[X]** annually.
- REWRITTEN Designed and launched a supplier qualification program for **[X]** OEM hydraulic hose suppliers, establishing **[X]** qualification criteria and testing **[X]** product lines — reducing incoming defect rate by **[X]%** and securing **$[X]M** in new OEM contracts.
- REWRITTEN Generated **[X]** job-order cost estimates for custom hydraulic hose assemblies, pricing **$[X]K–$[X]K** per order for OEM and distributor customers — achieving **[X]%** quote-to-close conversion rate and contributing **$[X]** in annual revenue.
- REWRITTEN Created **[X]** hydraulic fitting designs and manufacturing drawings in SolidWorks and AutoCAD, reducing revision cycles from **[X]** to **[X]** per design — supporting on-time release for **[X]** product launches.

Maintenance Supervisor

Sep 2020 – Jan 2021

Hormel Foods, Nevada, IA

- REWRITTEN Supervised **[X]** second-shift mechanics and coordinated **[X]** maintenance activities per week across **[X]** production lines at a **[X — production volume?]** food processing facility — maintaining **[X]%** equipment uptime and reducing unplanned downtime by **[X]%** through proactive scheduling.
- REWRITTEN Diagnosed and resolved **[X]** mechanical, electrical, and structural failures across plant operations, reducing mean time to repair by **[X]%** — preventing **$[X]** in production losses during a period when downtime cost **$[X]/hour**.

Product Application Engineer, Gears Jun 2018 – Jul 2020

Danfoss Power Solutions, Ames, IA

- REWRITTEN Optimized gear pump/motor selection for **[X]** OEM accounts, matching performance and durability targets to application requirements — contributing to **$[X]M** in annual product revenue and achieving **[X]%** customer satisfaction on first-fit acceptance.
- REWRITTEN Created **[X]** tailored commercial packages with strategic pricing configurations, securing **[X]** new OEM contracts worth **$[X]M** combined — with average lead-time commitments **[X]%** better than competitors.
- REWRITTEN Led failure analysis on **[X]** gear product performance issues, identifying **[X]** root causes and implementing design/process changes that reduced field failure rate by **[X]%** — saving **$[X]** in warranty claims annually.

Graduate Research Assistant 2 PUBLICATIONS

Jun 2018 – Jul 2020

Hashemi Lab, Iowa State University

- REWRITTEN Engineered a novel method for synthesizing biocompatible graphene via hydrodynamic cavitation — **published in Nanotechnology (2021)** — demonstrating **[X]%** improvement in exfoliation efficiency over conventional methods and advancing scalable production of few-layer graphene for biomedical applications.
- REWRITTEN Designed and executed **[X]** fluid dynamics simulations of Venturi tubes using COMSOL Multiphysics and ANSYS Fluent, validating cavitation parameters within **[X]%** of experimental measurements — directly informing the reactor design published in the **Royal Society Open Science (2021)**.
- REWRITTEN Applied Raman spectroscopy and X-ray diffraction analysis to characterize **[X]** graphene samples, confirming few-layer structure with **[X]%** purity — establishing the quality benchmarks used across **[X]** subsequent lab studies.

Graduate Research Assistant

Aug 2017 – May 2018

IDEA Lab, Iowa State University

- REWRITTEN Designed and implemented a Newton-Raphson ray casting algorithm for Bezier curves and patches in MATLAB, achieving **[X]%** intersection accuracy at **[X]x** faster computation than the lab's prior brute-force method — adopted as the standard intersection solver for **[X]** ongoing CAD geometry projects.

Product Engineering Intern

May 2017 – Aug 2017

Nexteer Automotive, Saginaw, MI

- REWRITTEN Analyzed back-drive vs. torque-to-turn behavior across **[X]** rack-and-pinion steering variants, developing VBA scripts to filter and correlate **[X]** data points — identifying **[X]** parameter thresholds that informed the calibration spec for **[X — vehicle platform?]**, reducing validation test iterations by **[X]%**.

Design Engineering Intern

Jul 2015 – Dec 2015

Altec Industries, St. Joseph, MO

- REWRITTEN Audited **[X]** assemblies and updated manufacturing BOMs in SolidWorks, resolving **[X]** discrepancies between as-designed and as-built configurations — preventing **[X]** incorrect parts from reaching the production floor and saving an estimated **$[X]** in rework.
- REWRITTEN Redesigned **[X]** components to improve manufacturability using SolidWorks, reducing fabrication steps by **[X]%** and cutting per-unit production cost by **$[X]** — changes adopted across **[X]** product lines.

TECHNICAL SKILLS

Process Safety & Reliability: LOPA, Root Cause Analysis (RCA), API 579 Fitness-for-Service, API 571 Damage Mechanisms, Quantitative Risk Analysis, MOC Leadership

Engineering Design & Analysis: SolidWorks (3D modeling, FEA, drawings), AutoCAD, Bluebeam Revu, COMSOL Multiphysics, ANSYS Fluent

Data & Business Intelligence: Power BI (dashboards, compliance tracking), Python (NumPy, Pandas, Scikit-learn), MATLAB, SAP, PI Vision, Excel (advanced)

Project & Operations: Six Sigma Green Belt, Google PM Certified, Outage Planning, Contractor Oversight, Salesforce CRM

PUBLICATIONS

- De Alwis, S., et al. (2021). "Hydrodynamic cavitation for scalable exfoliation of few layered graphene nanosheets." *Nanotechnology*, 32(50), 505701.
- Thomas, D.G., De Alwis, S., et al. (2021). "Protein-assisted scalable mechanochemical exfoliation of few-layer biocompatible graphene nanosheets." *R. Soc. Open Sci.*, 8, 200911.

LEADERSHIP & AWARDS

- **SAE Hydraulic Hose and Hose Fittings Committee** — Continental representative (Apr 2022 – Jan 2023)
- Norfolk Area Chamber of Commerce Leadership Class — Participant (Oct 2021 – May 2022)
- **Graduate & Professional Student Senate Leadership Award** — Recipient (Apr 2020)
- Iowa State University Legislative Ambassador (Oct 2019 – Apr 2020)
- **Dean's Students Leadership Award** — Recipient (Apr 2018)

Before & After — Best Examples

ORIGINAL (Doer Level)

"Conducted Layer of Protection Analysis (LOPA) for potential equipment failure and defined engineered solutions."

REWRITTEN (Impact Standard + Dragon Slayer)

"Conducted [X] Layer of Protection Analysis (LOPA) studies on potential equipment failure scenarios, identifying [X] high-risk gaps and defining [X] engineered safeguards — reducing residual risk to tolerable levels on equipment valued at $[X]M and ensuring compliance with OSHA PSM 1910.119."

ORIGINAL (Doer Level — "Worked with" language)

"Worked with suppliers and BP planning group in defining multi period inventory models for code compliant components for routine maintenance and outages."

REWRITTEN (Impact Standard + Me-in-We Fix)

"Developed multi-period inventory models for code-compliant spare components, analyzing vendor lead times and consumption rates in SAP — reducing emergency procurement by [X]% and maintaining [X]% parts availability during [X] planned outages, preventing $[X] in expediting premiums."

✗ **ORIGINAL (Achiever Level — close but no metric)**

"Improved hose production by reducing bottlenecks and process variability."

✓ **REWRITTEN (Impact Standard)**

"Improved hose production throughput by [X]% by identifying and eliminating [X] bottlenecks using [Lean/Six Sigma], reducing process variability by [X]% — recovering [X] units/day of lost capacity valued at $[X] annually."

🎯 Summary: What Steven Needs to Do

1 Add metrics to EVERY bullet — especially BP

Go through every line and ask: how many? How much money? What percentage? How fast? BP refinery work has incredible numbers hiding — outage durations, equipment values, contractor headcounts, compliance rates. Even conservative estimates ("approximately $200K") are infinitely better than nothing.

2 Weaponize the Dragon Slayer at BP

You work at a **refinery**. The stakes are inherently massive — safety incidents, environmental risk, $millions in downtime per day, OSHA/EPA regulatory exposure. Every LOPA, RCA, and start-up bullet should open with the scale of what was at risk. "On a unit where unplanned downtime costs $X/hour..." or "Following an incident that triggered a PSM investigation..." — the dragon is already there, you just need to name it.

3 Kill "Worked with" and "Oversaw" — own it

Replace every "Worked with suppliers" → "Developed." Every "Oversaw contractor execution" → "Directed [X] contractors." Every "Oversaw testing" → "Validated [X] test campaigns." You did the work — claim it.

4 Rewrite the Summary as a value proposition

Don't open with your job title and years of experience. Open with your biggest measurable win. "Process Safety Engineer who reduced incident recurrence by X% at BP Whiting" is a hook. "Mechanical Engineer pursuing an MBA" is a LinkedIn headline.

5

Eliminate verb repetition ("Defined" x3)

Ctrl+F for repeated verbs. Replace duplicates with stronger alternatives: Architected, Quantified, Established, Structured, Engineered. Variety signals effort and sophistication.

6

Strengthen or consolidate thin roles

The Continental (Fittings) role has 3 bullets — 2 of which are one-liners ("Managed specification workflows," "Oversaw testing"). Either expand them with the full Impact formula or merge the two Continental roles and cut the weakest bullets. Same for the Altec internship — 2 thin one-liners waste space.

7

Connect publications to experience bullets

The research bullets should explicitly mention that the work was published. "Engineered a novel method... — published in Nanotechnology (2021)" closes the loop and proves the research had external validation. Don't make the reader connect the dots between your Experience and Publications sections.

✓ What's Already Working

Deep, real-world experience

6+ years across BP, Continental, Danfoss, Hormel, Nexteer, and Altec. This isn't academic fluff — it's refinery outages, OEM product launches, plant maintenance, and supplier negotiations. The substance is there.

Tools integrated naturally into bullets

Power BI, LOPA, RCA, SolidWorks, AutoCAD, COMSOL, ANSYS Fluent, VBA, Salesforce, MATLAB, SAP, PI Vision — all appear IN context within experience bullets, not just listed in Skills. This is exactly what the Impact Bullet Builder teaches.

Impressive certifications stack

API 579, API 571, Six Sigma Green Belt, Google PM — these are industry-recognized credentials that immediately signal credibility. Well-placed before the experience section.

Published researcher with 2 peer-reviewed papers

Two publications in Nanotechnology and Royal Society Open Science is rare for an industry engineer. This differentiator just needs better positioning and connection to the experience section.

Progressive career trajectory

Intern → Development Engineer → Maintenance Supervisor → Mechanical Engineer → PSM Engineer, plus pursuing MBA. Clear upward trajectory that tells a growth story. The resume just doesn't leverage this narrative yet.

Scorecard: Impact Bullet Builder™ Criteria

Criteria	Score	Notes
Accomplishments (not duties)	4/10	Some bullets hint at accomplishments ("Improved hose production," "Engineered a novel method") but most still read as job descriptions. BP bullet "Led system start-ups" is an action, not an outcome.
Metrics / Quantification	1/10	Zero numbers across the entire resume. No percentages, no dollar amounts, no counts, no time savings. 6+ years of experience with nothing quantified.
How / Method Shown	7/10	Strong. Power BI, LOPA, RCA, SolidWorks, COMSOL, ANSYS, VBA, Salesforce all appear naturally in bullets. This is the resume's best element.
Why / Business Impact	1/10	No bullet answers "why does the CEO care?" No connection to revenue, cost savings, risk reduction, customer outcomes, or compliance value. Massive gap.
Me-in-We Extractor™	5/10	"Worked with suppliers and BP planning group" hides contribution. "Oversaw contractor execution" and "Oversaw testing" are vague. But many bullets do start with strong "I did" verbs.
Dragon Slayer Context	0/10	Zero problem context on any bullet. The BP refinery role has natural life-and-death stakes, $billions in assets, regulatory exposure — none of it is used. Biggest missed opportunity.
Action Verbs	6/10	Good variety overall (Led, Conducted, Built, Engineered, Diagnosed, Developed). Weakened by "Worked with" x2, "Oversaw" x2, and "Defined" x3 (repetition).

Criteria	Score	Notes
Bullet Quality Consistency	3/10	BP bullets are the strongest but still lack metrics. Continental, Hormel, and internship bullets are thin one-liners with no substance. Quality drops off sharply below BP.
OVERALL SCORE	**35/100**	**Tier: "The Achiever" (Low End) — has real experience, needs the framework to communicate it**

The Good News

The raw material here is **exceptional**. Steven has 6+ years across BP, Continental, Danfoss, and Hormel — including process safety at one of the largest refineries in the Midwest. He has industry certifications (API 579, Six Sigma), two peer-reviewed publications, a near-4.0 MBA, and an SAE committee seat. Most candidates would kill for this background. The problem is purely communication: every bullet describes the task without quantifying the result or explaining why it mattered. Applying the Impact Bullet Builder formula — especially adding metrics and Dragon Slayer context to the BP role — would likely shoot this resume from 35/100 to 80+ in a single focused session. The dragons are already in the resume; they just haven't been slayed yet.