🚇 James O'Flanagan



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Resume Summary

With over two decades of experience, "Jim" is the president and principal engineer at OAPSIE Inc., a contract engineering agency that handles complex engineering problems in the mechanical and computational domains.

Jim and his team provide services in:

<u>Design & Analysis</u>:

♠ Thermal, Mechanical, Software, Computation,

Business Consulting: <a> Research and Development (R&D), <a> Engineering Management

Programming:● Java, ⑤ SQL, ⑥ Python, ⑤ JavaScript, ⑥ C++, Linux Bash, № MySQLResearch:○ New Cloud Technologies, ⑥ HPC, ♠ Amazon Web Services, ⑥ GPT4.0CAD:▲ AutoCAD, ♠ Solidworks, ☐ Catia, ☐ Pro/E, ☐ Unigraphics, ⑥ Fusion 360

Jim has experience in the following industries:

🚜 Automotive, 😾 Biotech, 🧵 Oil & Gas, 📲 Consumer Devices, 🚅 Naval Reactor Equipment,

🚛 Shipping & Logistics, 🕌 Manufacturing, 🌼 Machining & Fabrication

Jim has a solid foundation in:

Mechanical Engineering, Software Development, Project Management, High Performance Computing, ↑ Thermal, Mechanical, Composites, Non-Linear Simulation, Computation, Servant Leadership, Kindness, Management, Gen/Al/ML, Physics

Jim is a LinkedIn "Top Voice" in:

🗘 Programming, 👔 Project Management, 🚙 Product Development

Jim has an interest in:

Generative AI, ♣ Engineering, ♣ Recreation, ■ Technology, ♠ Outdoors, ➡ Media, ♣ Family, ♣ Conservation, ♠ Community

Jim's Personal Mission Statement is:

☐ To Deliver innovative and reliable engineering software solutions, Meets or exceeds the needs and expectations of my clients & partners, Uplift Humanity, Preserve our environment and resources, Support those in need of it, Be kind, courteous, and respectful in all Personal and Business Relationships, Leave the world better than I found it.

Experience

• Publisher, OAPSIE•Inc., Mar 2021 – Present (2 yr 9 mos)

OAPSIE Media Inc. is the media arm of OAPSIE Inc.

Its primary functions are to: 1 Regularly publish material to its constellation of Micro information Newsletters, The Galaxy of Edi YouTube channel, and various other media properties. 2 Maintain all compute systems used by OAPSIE Inc. →In this capacity, I run a series of Newsletters and video channels, all pertaining to outdoors and conservation in one way or another:

<u>Channels</u>: https://eastrimtrail.com, <a href="https://ea

• Chief Engineer, OAPSIE•Inc., Mar 2019 – Present (4 yr 9 mos)

<u>Design Lead</u>: 1 OAPSIE is a contract engineering agency. We handle nearly any type of engineering problem imaginable. Our products and services include both engineering analysis hours and bespoke software programs that solve your engineering issues. That last part is what we're best at! 2 Worked on a Biomedical device involving the eye, the structure for a natural gas processing plant, device for your feet made of rubber a medical device.

On the business side, handle all: 1 Accounting, 2 Human Resources, 3 Taxes, 4 Investments/Fundraising 5 Recruiting, 6 Training, 7 Project Execution, and 8 Strategic Planning for OAPSIE Inc.

• Senior Design Engineer, Johnson Matthey, Sep 2019 – Oct 2020 (1 yr 2 mos)

<u>Engineer / Mentor</u>: 1 Project Manager design and prototype manufacturing for natural gas plant extraction equipment. 2 Technical Expert, Simulation Technology (CFD, FEA) for natural gas plant design.

• **Principal Engineer**, Hankook Tire, May 2016 – Sep 2019 (3 yrs 5 mos)

<u>Project Engineer / Software Engineer</u>: 1 Led new release of North America Load Deflection Tool FEA design simulation software. 2 Led global collaboration for design and simulation tools with the goal of saving \$100 million

Design Engineer, Babcock & Wilcox, Jul 2012 – May 2016 (3 yrs 11 mos) Stress Analyst / Shipment Logistics Expert: 1 Pressure Vessel Design for Naval Nuclear components 2 Held DOE Level L Security Clearance 3 Technical and fabrication lead in \$2.6 million shipping rig design and procurement project for BWXT. 1 Design engineer for lifting, handling, thermal/mechanical finite element analysis for ASME and MIL spec pressure vessel design. 5 AISC steel structure design for reactor vessel shipping rigs; ASME B30 Lifting Standard for shipping and handling logistics. **Development Engineer,** The Goodyear Tire & Rubber Company, May 2001 – Jul 2012 (11 yrs 3 mos) Finite Element Analyst (FEA): 1 Project Leadership in Simulation Technology for GM products. 2 New Simulation Technology development for Tire Design. 3 Application of SimTech for Tire Design Software Engineer: 1 Software: Big data, Data mining Programming, Excel/VBA Programming support 2 Tire Design, Tire Dev Metrics, Technical support and leadership; 8 months tire build experience. **Education** The University of Akron, 2007 – 2010 Activities and societies: P Golden Key International Honor Society | Master's Report: Outsourcing at Large U.S. Industrial Companies; Sound or Unsound? Course of Study: * Finite Element Analysis (FEA), Continuum Mechanics, Tires, Partial

Representation of the property of Differential Equations, 📈 Business Information Systems, 🦹 Human Resources, 🞨 Computer Aided Design. Grade: 3.85. See: https://oapsie.com/college-transcripts Case Western Reserve University, Bachelor of Science, Computer Engineering, 2000 - 2002<u>> Courses of Study</u>: 💂 Software Engineering, 🙅 Statics, 💪 Strength of Materials, 😑 П VHDL, # Statistics, | Numerical Methods, | Economics, | Accounting, | Artificial Intelligence, https://doi.org/10.1007/ Architecture, 🔸 Logic Circuit Design, 🕼 Chemical Engineering, 🏭 Manufacturing Technology, A Computer Aided Design, Systems Engineering, Linear Algebra, 📙 Boolean Logic, 🔋 Integrated Circuit Design. Grade: 2.9.

• John Carroll University, Engineering Physics/Applied Physics, 1998 – 2000

Activities and societies: Sigma Pi Sigma Physics National Honor Society, Football

→ Course of Study: Legineering Physics (EP), Computer & Electronics Engineering,

→ AC Circuit Theory, Modern Physics, Political Science, Legineering,

□ Differential Equations, Philosophy. Grade: 3.86.

Transferred to: Case Western Reserve University to study _ Computer _ Engineering

Licenses & certifications

- Top Product Development Voice LinkedIn, Issued Sep 2023
 Credential ID Signifies Top 50 Rank on LinkedIn.com
- Top Project Management Voice LinkedIn, Issued Sep 2023
 Credential ID Signifies Top 50 Rank on LinkedIn.com
- Top Programming Voice LinkedIn, Issued Aug 2023
 Credential ID Signifies Top 50 Rank on LinkedIn.com

Skills

Product Development | Project Management | Programming | Intelligent Engineering | Artificial Intelligence (AI) | Computational Mechanics | Software Development | Agile Methodologies | Servant Leadership | System Performance

Honors & awards

- **NEO Science Fair NEO SCIENCE AND ENGINEERING FAIR,** Mar 2023 Judge for 70th Annual Science Fair at Cleveland State University.
- Golden Key Golden Key International Honour Society, Nov 2008
 Source: https://oapsie.com/honor-societies-1
- Sigma Pi Sigma Sigma Pi Sigma, May 1999

 Physics National Honor Society.
- Order of The Engineer The University of Akron, Mar 2023

 Credentials: https://oapsie.com/the-order-of-the-engineer