

## Contact

[www.linkedin.com/in/jamestruxon](https://www.linkedin.com/in/jamestruxon)  
(LinkedIn)  
[www.soft-effect.com](https://www.soft-effect.com) (Personal)

## Top Skills

Integration  
Machine Learning  
Python (Programming Language)

## Languages

English (Native or Bilingual)  
Spanish (Professional Working)

## Certifications

SQL Server Machine Learning  
Services: Python  
Understanding the Impact of  
Deepfake Videos  
Advanced NLP with Python for  
Machine Learning  
Microsoft Azure: Controlling Cost  
Serverless Architecture

## Publications

Lifetimes for Rydberg States of Cs  
with  $n < 45$  in a Black-Body Radiation  
Field.  
Time Resolved Current Waveform  
and Light Emission in a PDP  
Semi-empirical Lifetimes for Rydberg  
States of 133 Cs I in a Black-Body  
Radiation Field  
1-D Model of a Helium AC Discharge  
in PDP  
An enhanced database of atomic  
data for numerical simulations of  
plasma discharges

# James Truxon

Data and Development Operations Lead at Corning Inc.  
Corning, New York, United States

## Summary

Machine learning is the crossing point for the skills and interests that I've developed throughout my student and professional career: physics, mathematics, coding, philosophy, neurobiology, and process automation; I will be building and investigating the boundaries of this space until I retire, and beyond.

Like many powerful technologies, it has the capability of benefiting the world or breaking it. My goal is to be designing systems that are robust allies in a sea of massive data warehousing, unblinking eyes in the right place to keep people safe and processes optimized, and ethically sound methods of advancing the field.

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## Experience

Corning Incorporated  
1 year

Data and Development Operations Lead  
May 2022 - Present (1 year)  
Corning, New York, United States

Data and Development Operations Lead  
May 2022 - Present (1 year)  
Corning, New York, United States

Corning Museum of Glass  
8 years 4 months

Manager, Development and Artificial Intelligence  
November 2017 - May 2022 (4 years 7 months)  
Corning, NY

Machine learning, business strategy, staff management, agile development

- Manages strategy and practical applications of machine learning for the organization
- Manages strategy, information architecture, and feature implementation for org-wide transitions, including SharePoint Online & Microsoft Teams

- Developed python-based real-time face detection application with integration against Google, Azure, and IBM Watson's image analysis APIs for sentiment inference
- Developed a NodeJs bot for MS Teams to create an IT Helpdesk point of presence within all teams across the organization
- Developed an Azure Cognitive Services bot for MS Teams that provides a conversational interface to our internal knowledgebase using natural language processing of free-form questions
- Developed python-based tag extraction & concept clustering script for document corpus analysis to support transition from legacy deep folder structures to shallow, metadata-supported SharePoint libraries
- Designed and implemented a CI/CD pipeline around git, Bitbucket, Jenkins
- Established a docker-based internal application framework, internal container registry, and automated container build workflows for CI/CD pipeline
- Designed and implemented a production Kubernetes cluster for hosting and serving container-based workloads, using the Rancher cluster orchestration platform
- Created .NET-based learning & development tracking portal, integrated with external LMS RESTful APIs and internal instructor-led course tracking
- All responsibilities associated with previous role, fully remote in 2020 with all direct reports

### Lead Application Developer

February 2014 - November 2017 (3 years 10 months)

Corning, NY

Full stack development, IT strategy, management, devops

- Manages all internal application development & support
- Supervises IT software engineering staff, including talent development
- Established, and currently administers a formalized university internship program
- Maintains subject-matter expertise for all internally-managed data sources
- Serves as technical lead and integration expert for all significant staff-facing projects, managing project teams, establishing deliverables, setting timelines, creating and delivering communications, and creating support structures for staff self-governance
- Serves as chairperson to multiple cross-functional working groups

### Soft Effect Technology Solutions

Owner, Consultant

August 2006 - February 2014 (7 years 7 months)

Avoca, NY

Entrepreneurial experience, information design, client relationships, user experience, client training

- Developed and marketed a suite of client-managed, modular web components including DHTML WYSIWYG content management, event management, news management, ecommerce, searchable knowledge base, and email marketing tools for SMB market
- Operated redundant dedicated Windows servers for hosting, email, and anti-spam services
- Maintained relationships with a client base ranging from small businesses to higher education and Fortune 500 companies
- Provided technological advocacy and consulting for local businesses and non-profit organizations

### Lehman Alternative Community School

Science Teacher

September 2012 - June 2013 (10 months)

- Taught Physics (grades 10-11), Physical Science (grades 8-10), and Computer Science (grades 7-8).
- Primary faculty advisor to 36 students (grades 6-12) in guidance, commencement project support, and mentoring roles

### Gateway Defender

DBA, Senior Developer

April 2004 - July 2007 (3 years 4 months)

Database administration, full stack development, email spam & virus scanning, remote work

- Served as development team leader for core product enhancements, new client services, and improved internal business processes
- Managed external software suppliers
- Developed and administered a SOAP-based API that offered clients back-end integration capabilities
- Sole level 3 tech support for a user base of over 100,000
- Provided 24/7 Monitoring and maintenance of high-availability SQL cluster operating at 10K transactions per minute

### Avatar Syndicate, LLP

Co-Founder, Partner & Senior Software Engineer

August 1997 - April 2006 (8 years 9 months)

Entrepreneurial experience, full stack development, devops

- Built a successful custom software development business from startup to maturity, including new business development, strategic planning, human resource management, and annual budgeting
- Managed client relationships, created project strategy, managed budget allocations, created estimates for development and timeline projection
- Built custom applications and data management solutions for a diverse and extensive client base that included regional, national and global organizations

The University of Toledo  
 Graduate Research Assistant  
 1996 - 2001 (5 years)  
 Toledo, Ohio, United States

Computational physics, neural network development

- Participated in the Plasma Display Panel joint experimental and theoretical research group, assisted in the development of nanosecond-resolution numerical Boltzmann simulations of plasma discharge using multigrid techniques
- Developed an object-oriented Particle-In-Cell (PIC) simulation framework using Borland Delphi
- Developed applications for calculating electron scattering phase shifts and electron scattering cross-sections for a wide range of atomic species
- Assisted with analysis of Martian polar albedo measurements based on WFPC2 images from the Hubble telescope
- Taught undergraduate physics lab classes

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## Education

University of Toledo  
 Master of Science (MS), Physics · (1996 - 2012)

Alfred University  
 Secondary Education and Teaching · (2009 - 2010)

Corning Community College  
 Secondary Education and Teaching · (2009 - 2010)

University of Toledo  
 Bachelor of Science (BS), Physics · (1992 - 1997)