# Loren Heyns

Full Stack Developer, Team Project Leader, Safe Generative AI, Data Visualizations, Collaborative Machine Learning

Experience	
<b>Model.earth Collaborative Framework</b> Project owner and lead engineer for data visualization teams developing industry comparison tools. Location trend forecasting integrating Open WebUI UX with Google Data Commons API. US and international trade flow analysis combining Python ML, Supabase, D3 and Leaflet maps.	2020 to 2024
<b>Georgia Department of Economic Development</b> Programmer Analyst, Senior Software Engineer, JAM Stack Developer, Salesforce, Azure, Cognito. Directories for Georgia Film, Aerospace, Trade and Recycling. Interactive Visualizations, MapBox.	2015 to 2024
<b>Network Dynamics Lab at Georgia Tech</b> AWS Aurora PostgreSQL app for analysis of mobility changes during hurricanes using X data. Presentations on civil engineering and transportation. Research CV at dreamstudio.com/research.	2018 to 2019
<b>DreamStudio Interactive</b> Cofounder and CEO, Lead Software Engineer, SQL Database Admin and AWS Web Apps. Developed .NET Content Management Systems for membership, news and scheduling.	2000 to 2015
<b>Seaside Institute and Glenwood Park</b> News and directory services for New Urbanist design projects, realtors and Atlanta foundations. Websites for 8 neighborhood associations including Midtown, West End and Grant Park.	2000 to 2015
<b>Georgia State Parks and Historic Sites</b> Website SQL CMS development and hosting for park events, golf courses and lodge sites. Campground Host management and background check system using C# and Microsoft .NET. Wireless ticketing for excursion trains, AWS hosting of calendar websites and SQL database admin.	2000 to 2015
<b>CNN and Time Warner</b> Created management system for satellite news feed scheduling using our DreamStudio CMS. Calendar for Time Warner AtlantaCares integration with Hands On Atlanta project scheduling tools.	2000 to 2004
<b>Interactive Planet, Inc. – Southern Company</b> Lead Software Engineer and UX/UI Designer developing membership apps for news emails. Developed content management system for Southern Company and seven affiliates. Created home energy apps and cellular service websites, banking services and restaurant apps.	1995 to 2000
Education	
<b>Georgia Institute of Technology</b> Computer Science CSE - 2 semesters toward PhD. Focused on infrastructure and sustainable dev. Software Engineering, Data Visualization, SQL, Python, jQuery, 3D Design, Construction Apps.	2018 to 2019
University of California Santa Barbara	1986 to 1991

BA Business Economics, BA Communication Studies, 1.5 years toward Masters at Michigan State. Financial Accounting, Art History, Screenwriting, Photography, C+/Unix, Environmental Economics.

## Loren Heyns

**Technical Skills** 

### **Business Tools / Platforms**

Google Cloud Platform, Cloudflare Hosting and DNS Management, GitHub Pages, GitHub Actions AWS, Azure, SharePoint, Microsoft Power BI, Salesforce, Tableau, Databricks, SketchUp, Autodesk Squarespace, Wix, Apache eCharts, ObservableHQ D3 visualizations, Zapier, Jira, Trello, Basecamp Google Data Commons API timeline visualizations, Cognito Forms, Drupal, WordPress, Django MailChimp, Mailtrap, Google Analytics, Excel AI, Microsoft Copilot, ChatGPT Actions

### **Programming / Development Tools**

JavaScript, jQuery, Leaflet, MapBox, Node, React, NextJS, Bun, C#, .NET Core, IIS Admin Python, PyTorch, NLP, XGBoost and Random Forest ML, Streamlit Python UI Supabase, DuckDB and Spark SQL, PostgreSQL, Microsoft SQL, SQLite, CartoDB maps Sublime Text, VS Code, WebStorm, GitHub Actions, YAML profile apps, CSS3, HTML5

#### Generative AI and UX/UI Design Tools

Llama OpenWebUI, OpenAI GPT Actions, RAG, Hugging Face, Json API feed widgets Al Video generation with Runway, Luma, Pica Labs, Leonardo, Replicate API Al Image generation with Midjourney, Stable Diffusion with GetImg.ai, Stability.Al Assist Adobe Photoshop, Illustrator, InDesign, Adobe Premiere and CapCut video editing

CV at https://dreamstudio.com/research Active Projects at https://model.earth/projects