Alessandro G. Magnasco

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« Experienced data scientist for critical infrastructure »
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`X∃LATEX passing`

6 YEARS OF EXPERIENCE MANAGING CRITICAL DATA SYSTEMS

- Master of Science in Data Analysis and Visualization, CUNY Graduate Center.
  » Focus on non-standard statistical distributions, machine learning in Python and R
  » Custom visualizations in D3.js, matplot, seaborn, ggplot, TEX, Leaflet.js
  » Doctoral coursework in demographic calculus and geographic theory

- Carried out the full-stack design and rollout of several new servers, databases, CRM systems, and websites.

- 7 years of experience managing DBs, including implementation and migration from other DBs
  » PostgreSQL, Salesforce, Airtable, various CRMs, various SQL-based

- 4 years of experience managing ETL pipelines in Python and R, and machine learning (tidyverse, scikit-learn, pandas)

- 5 years of experience managing GIS pipelines, both static and dynamic, web and print

- FEMA-certified emergency manager for infrastructure; 3 years as supervisor for all phases of EM.

- Linux since 1998: RHEL, Ubuntu, Arch, Raspbian/Debian, Kali, Tails, Xen/Qubes; low-latency kernels; custom hw interfaces.

10 YEARS OF EXPERIENCE RUNNING CORE PROJECTS

- Designed and carried out to completion several mission-critical projects in different fields.

- Managed company-wide purchasing for technology products and services.

- Experienced working with and managing tens of Executive Boards and hundreds of project teams.

- Reduced overhead costs when reconciling and auditing budgets of over US$5,000,000.

- Panelist, hackathon awardee, technical and non-technical presenter to thousands of people.

EXPERIENCE » @ Five universities, five startups, two dozen orgs (list below)
2012 – ongoing » North America, Caribbean, South America, Middle East

- On projects ranging from days to years, with the American Red Cross, Rockefeller University, State University of New York, Cornell University, Columbia University, City University of New York, Violence Intervention Program, Habitat for Humanity, Fundacion Irradia, Interfaith Center for Sustainable Development, Mothers Helping Mothers, NY Tech Guild, Increasing Community Unity, Creating Healthy Places, Flatbush Tenant Coalition, Impacct, Chemung County Poverty Reduction Coalition, NYC Housing Data Coalition, Stabilizing NYC Coalition, Right to Counsel Coalition, Anti Eviction Mapping Project, Housing Finance Coalition, Association for Neighborhood and Community Development Banking/CRA Coalition...
  RESULT: Multiple repeat clients, three international expansions, multiple successful launches

- Sole or lead administrator for three dozen data systems, 4 server groups/3 LAMP stacks, and 6 CRM databases.
  » Six years managing protected healthcare data (patient info) & finance data (trading and ledgers)
  » Six years managing environmental data (autecological and synecological)
  RESULT: >99.99% uptime. No known breaches.
  RESULT: Authored plans reducing department IT expenses by >70% and boosting client retention

- Lead technical analyst and researcher on organizational data and infrastructure, with a focus on compliance and privacy
  » Heavy, daily geostatistical analysis of various datasets on, for example, the entire population of NYC (n>8M)
  RESULT: average 2-day data science turnaround allowed for quick decision-making
  RESULT: created data analysis tools to cut manual analysis time down by >40,000x (1 week down to 5 min)

- Led assessments of data compliance (PCI, HIPAA, HUD, etc.)
  RESULT: Created cross-referenced compliance plans for multiple frameworks.
  RESULT: Same-day mitigation plan for >$3M discovered privacy/cybersec exposure.

- Deep embedding in multiple departments as needed for reporting capabilities
  RESULT: Designed and carried out hundreds of technical and non-technical presentations to thousands of people
  RESULT: 400% increase in staff trained in data use and analysis

- Orchestrated analytics-driven design & rollout of brand-new websites, servers, CRMs, and project management systems.
  RESULT: Significantly scaled up operations and multiple expansions, increasing productivity and revenue.