

# Mike Bobak – Knowledge-Engineer / Research-Programmer

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## EXPERIENCE

**Freelance — Knowledge-Engineer/Ontologist** /2011-present (San Francisco)  
Semantics/data-sci consulting, including. IoT, CMS, pharma-ontologies.

**[Apollo Group](#) — Architect, Adaptive Learning Platform** /2010-11 (San Francisco)  
Semantic annotation of tests and related study materials so needs could be surfaced.

**[UCSF](#) — Programmer/Analyst III** /2007-10 (San Francisco)  
Semantic annotation of clinical trial entrance descriptions to automake induction.

**Freelance — Knowledge-Engineer/Programmer** /2001-07 (Chicago/Boston)  
Brightware-like follow on rule-based consulting, including Verizon and others.

**[Beckman Institute](#) — Research Programmer** /1998-2001 (Champaign)  
Coordinated software teams to make an immersive intelligent simulation tutor.

**[Brightware](#) — Knowledge-Engineer/Programmer** /1996-98 (Chicago)  
Helped design and did first install of an automated email answering system, and more.

**[Institute of Learning Sciences](#) — Lead Programmer/Analyst** /1996 (Evanston)  
Extended a model-based explainable simulation/Intelligent-Tutoring-System.

**[Argonne National Lab](#) — Software Engineer** /1993-96 (Argonne)  
Wrote expert-system for EPA, then knowledge-guided distributed eco-simulation.

## EDUCATION

**University of Illinois, Urbana-Champaign — MS Biophysics/Combio/AI**  
Wrote well-used molecular viz/minip package. Thesis: Knowledge-Guided Simulation.

**University of Illinois, Urbana-Champaign — BS Physics, BS Biophysics**  
Included work/study at an [allied lab](#), writing acoustics simulation, taking data and more.

More detailed resumes at:

<http://notional.no-ip.org/michael-bobak.html>

<http://mike.bobak.googlepages.com/m-bobak.pdf>

## SKILLS

AI

[Artificial Intelligence](#)  
[Adaptive-Systems](#)  
[Computational-Intelligence](#)

[Business-Rules/Expert-Systems Case-Based-Reasoning](#)  
[Intelligent Agents/Systems](#)

[Onto/Knowledge-Eng,Kn-Based-Systems](#)

[Ontology/Taxonomy Dev](#)  
[Controlled Vocabularies](#)  
[Conceptual/Decision-Modeling Knowledge-Representation](#)  
[Logic-Programming](#)

[Natural Language Processing/Understanding](#)  
[Text Classification](#) [SNOMED](#)

[Semantic:Web, Search Information](#)  
[Access/Extraction/Retrieval](#)

[Data Mining/Machine-Learning](#)  
[Data-Analysis](#)

[Model-based-reasoning](#)  
[Composite Applications](#) [Causal Inference](#) [Intelligent-Tutoring- Systems](#)

Science

[Research Scientific Viz/Simulation](#)

[Computational-Science](#)  
[Math/\(Bio\) physics](#)

Others

[HPC/Cloud-Computing: Mapreduce/Hadoop](#)

[Exploratory-Programming, Dynamic Languages, Common Lisp etc.](#)