

# Mike Bobak

Knowledge-Engineer / Research-Programmer

2104 Bryant  
San Francisco, CA 94110  
**(415) 894-9724**  
**mike.bobak@gmail.com**

## EXPERIENCE

**Freelance, SF — Knowledge-Engineer/Ontologist** 2011-present

Data-science/semantics study/projects and work, incl IoT, CMS, pharma-ontologies.

**ApolloGrp.edu, SF — Architect, Adaptive Learning Platform** 2010-11

Semantic annotation of tests and related study materials so needs could be surfaced.

**UCSF.edu, SF — Programmer/Analyst III** 2007-10

Semantic annotation of clinical trial entrance descriptions to automake induction.

**Freelance, Chicago/Boston — Knowledge-Engineer/Programmer** 01-07

Brightware like follow on rule-based consulting, incl Verizon and many other places.

**[kbs.ai.UIUC.edu](http://kbs.ai.UIUC.edu), Beckman Inst — (sr)Research-Programmer** 1998-2001

Coordinated software teams to make an immersive intelligent simulation tutor.

**[Brightware](http://Brightware), Chicago — Knowledge-Engineer/Programmer** 1996-98

Helped design and did first install of an automated email answering system.

**[Inst of Learning Sciences](http://Inst of Learning Sciences), Evanston, IL — Lead Programmer/Analyst** 96

Extended a model-based explainable simulation/Intelligent-Tutoring-System.

**[Argonne National Lab](http://Argonne National Lab), Argonne, IL — Software Engineer** 1993-96

Wrote expert-system for EPA, then knowledge-guided coupled 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 & more.

Expanded versions 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/KnowledgeEng,KnBased SysOntology/Taxonomy Dev Controlled Vocabularies Conceptual/Decision Modeling Knowledge Representation LogicProgramming](#)

[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](#)

[ComputationalSci Math/\(Bio\) physics](#)

Others

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

[ExploratoryProgramming, Dynamic Languages,Common Lisp etc.](#)