

# Mike Bobak

Knowledge-Engineer / Research-Programmer

2104 Bryant  
San Francisco, CA 94110  
(415) 894-9724  
[mike.bobak@gmail.com](mailto:mike.bobak@gmail.com)

## EXPERIENCE

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

Semantics/data-sci consulting, incl. IoT, CMS, pharma-ontologies, and related courses.

**[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 others.

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

Coordinated software teams to make an immersive intelligent simulation tutor.

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

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

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

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

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

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.

## 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.](#)

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

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