

# Mike Bobak

Knowledge-Engineer / Research-Programmer

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## 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** — KnowledgeEngineer/Programmer 2001-07

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

**kbs.ai.UIUC.edu, SF** — (sr) Research-Programmer 1998-2001

Coordinated software teams to make an immersive simulation tutor.

**Brightware, Chicago** — Knowledge-Engineer/Programmer 1996-98

Helped design and did 1st install of an automated email answering system.

**Inst of Learning Sciences, nwu.edu, IL** — *Lead Programmer/Analyst 96*

Model-based explainable simulation used for tutoring.

**Argonne National Lab, anl.gov, 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/minp package. Thesis Knowledge-guided Molecular Simulation

**University of Illinois, Urbana-Champaign** — *BS Physics, BS Biophysics*

Included work/study at an allied lab, writing acoustics simulation, taking data & more

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

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

## SKILLS

### AI

[Artificial Intelligence Adaptive Systems](#)

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

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

[Onto/KnowledgeEng.KnBased Sys](#)

[Ontology/Taxonomy Dev Controlled](#)

[Vocabularies Conceptual /Decision Modeling](#)

[Knowledge Representation LogicProgramming](#)

[Semantic: Web, Search](#)

[Information Access/ Extraction/ Retrieval](#)

[Natural Language Processing/ Understanding](#)

[Text Classification SNOMED](#)

[Model-based-reasoning Composite Applications,](#)

[Causal Inference Intelligent Tutoring Systems](#)

### Science

[Research Scientific Viz/ Simulation](#)

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

### Others

[Cloud Computing:Mapreduce/Hadoop](#)

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