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| Mike Bobak  Knowledge-Engineer / Research-Programmer | 2104 Bryant  San Francisco, CA 94110  **(415) 894-9724**  **mike.bobak@gmail.com** |
| EXPERIENCEFreelance, 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 automate 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. EDUCATIONUniversity 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  Web-version: <http://mbcode.github.io/mike.bobak.html>  Longer versions at: <http://notional.no-ip.org/michael-bobak.html>  <http://mike.bobak.googlepages.com/m-bobak.pdf> | SKILLS  * AI   [Artificial Intelligence](http://www.linkedin.com/skills/skill/Artificial_Intelligence?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Adaptive Systems](http://www.linkedin.com/skills/skill/Adaptive_Systems?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [Business](http://www.linkedin.com/skills/skill/Business_Rules?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Rules](http://www.linkedin.com/skills/skill/Rules?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[/](http://www.linkedin.com/skills/skill/Rules_Engines?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[Expert Systems](http://www.linkedin.com/skills/skill/Expert_Systems?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Case-Based Reasoning](http://www.linkedin.com/skills/skill/Case-Based_Reasoning?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Intelligent Agents](http://www.linkedin.com/skills/skill/Intelligent_Agents?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)/[Systems](http://www.linkedin.com/skills/skill/Intelligent_Systems?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [Data Mining](http://www.linkedin.com/skills/skill/Data_Mining?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) /[Machine Learning](http://www.linkedin.com/skills/skill/Machine_Learning?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Data Analysis](http://www.linkedin.com/skills/skill/Data_Analysis?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [Onto](http://www.linkedin.com/skills/skill/Ontology_Engineering?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)/[KnowledgeEng](http://www.linkedin.com/skills/skill/Knowledge_Engineering?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof),[KnBased Sys](http://www.linkedin.com/skills/skill/Knowledge-based_Systems?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Ontology](http://www.linkedin.com/skills/skill/Ontology_Development?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)/[Taxonomy Dev](http://www.linkedin.com/skills/skill/Taxonomy_Development?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Controlled Vocabularies](http://www.linkedin.com/skills/skill/Controlled_Vocabularies?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Conceptual](http://www.linkedin.com/skills/skill/Conceptual_Modeling?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) /[Decision Modeling](http://www.linkedin.com/skills/skill/Decision_Modeling?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Knowledge Representation](http://www.linkedin.com/skills/skill/Knowledge_Representation?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Logic](http://www.linkedin.com/skills/skill/Mathematical_Logic?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[Programming](http://www.linkedin.com/skills/skill/Logic_Programming?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [Semantic](http://www.linkedin.com/skills/skill/Semantics?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof): [Web](http://www.linkedin.com/skills/skill/Semantic_Web?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[,](http://www.linkedin.com/skills/skill/Semantic_Technologies?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Search](http://www.linkedin.com/skills/skill/Semantic_Search?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [Information Access](http://www.linkedin.com/skills/skill/Information_Access?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)/ [Extraction/](http://www.linkedin.com/skills/skill/Information_Extraction?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Retrieval](http://www.linkedin.com/skills/skill/Information_Retrieval?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Natural Language Processing/](http://www.linkedin.com/skills/skill/Natural_Language_Processing?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Understanding](http://www.linkedin.com/skills/skill/Natural_Language_Understanding?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Text Classification](http://www.linkedin.com/skills/skill/Text_Classification?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [SNOMED](http://www.linkedin.com/skills/skill/SNOMED?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [Model-based-reasoning](http://en.wikipedia.org/wiki/Model-based_reasoning) [Composite Applications](http://www.linkedin.com/skills/skill/Composite_Applications?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof), [Causal Inference](http://www.linkedin.com/skills/skill/Causal_Inference?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Intelligent Tutoring Systems](http://www.linkedin.com/skills/skill/Intelligent_Tutoring_Systems?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)   * Science   [Research](http://www.linkedin.com/skills/skill/Research?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Scientific](http://www.linkedin.com/skills/skill/Scientific_Software?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [Viz](http://www.linkedin.com/skills/skill/Scientific_Visualization?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)/[Simulation](http://www.linkedin.com/skills/skill/Simulation?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) [ComputationalSci](http://www.linkedin.com/skills/skill/Scientific_Computing?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)/ [Math](http://www.linkedin.com/skills/skill/Computational_Mathematics?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[/](http://www.linkedin.com/skills/skill/Mathematical_Programming?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[(Bio)physics](http://www.linkedin.com/skills/skill/Computational_Biology?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)   * Others   [Cloud Computing:](http://www.linkedin.com/skills/skill/Cloud_Computing?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[Mapreduce/](http://www.linkedin.com/skills/skill/MapReduce?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)[Hadoop](http://www.linkedin.com/skills/skill/Hadoop?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof)  [ExploratoryProgramming](http://en.wikipedia.org/wiki/Exploratory_programming), [Dynamic Languages](http://www.linkedin.com/skills/skill/Dynamic_Languages?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof),[Common Lisp etc.](http://www.linkedin.com/skills/skill/Common_Lisp?goback=.npe_*1_*1_*1_*1_*1_*1_*1_*1.npe_*1_en*4US_*1_*1_*1_*1_*1_*1&trk=skills-ext-prof) |
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