

Xin Chen

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Interests:

Compiler and compiler generator theory and implementation.
AI, Bioinformatics, Software engineering.

Education:

Jan 2005 – Aug 2009
PhD, Computer Science. University of Hawaii at Manoa
Research area: Compiler Theory
Dissertation: Measuring and Extending LR(1) Parser Generation

Jan 2001 – Dec 2003
MS, Computer Science. University of Hawaii at Manoa

Aug 1998 – Dec 2000
MS, Biochemistry. University of Hawaii at Manoa

Sep 1994 – May 1998
BS, Biological Sciences and Technology. Tsinghua University, Beijing, P.R.China

Experience:

Dec 2010 –
PanSTARRS PSPS Software Engineer Research Corporation of University of Hawaii / Institute for Astronomy. Work on the development, deployment, maintenance and debugging of the PanSTARRS PSPS project in Astronomy. Handles TB size data.

Sep 2009 – Sep 2010
System Engineering Project Manager & Lead Developer Research Corporation of University of Hawaii. Lead, manage and coordinate to analyze, design, document and develop complex, scalable and large-scale web-based application. Collaborate with people of diverse backgrounds.

Jan 2005 – Aug 2009
Research Assistant University of Hawaii at Manoa. Geocoding client development, COM server/client development, Spell checking, Web crawling and information retrieval, large data sets processing, and web development.

Jul 2004 – Dec 2004
Application developer Decision Research Corporation. Work on business applications.

Mar 2004 – Dec 2004
Web developer (Part-time) Research Corporation of the University of Hawaii. Develop web applications. Created a framework code generator to immensely expedite the development process.

Jan 2001 – Dec 2003
Research Assistant University of Hawaii. Develop web applications. Redhat Linux administration.

Aug 1998 – Dec 2000

Teaching Assistant for Basic Biochemistry in Department of Biochemistry and Biophysics at University of Hawaii.

Publications:

Xin Chen, David Pager. LR(1) Parser Generator Hyacc. In *Proceedings of International Conference on Software Engineering Research and Practice*, p.490-495, *WORLDCOMP'11, Las Vegas, July 18-21, 2011*.

Xin Chen, David Pager. The Edge-Pushing LR(k) Algorithm. In *Proceedings of International Conference on Software Engineering Research and Practice*, p.471-477, *WORLDCOMP'11, Las Vegas, July 18-21, 2011*.

Xin Chen, David Pager. Introduction to Full LR(1) Parser Generator Hyacc And Study On The Performance of LR(1) Algorithms. In *Proceedings of The Fourth International C* Conference on Computer Science & Software Engineering*, p.83-92, *Montreal, Canada, May 16-18, 2011*.

Xin Chen. Poster: On the efficiency of LR(1) parser generation and LR(1) Parser Generator Hyacc. *PLDI 2008, June 6-13, Tucson, AZ*

Guylaine Poissona, Cedric Chauve, Xin Chen and Anne Bergeron. FragAnchor: A Large-Scale Predictor of Glycosylphosphatidylinositol Anchors in Eukaryote Protein Sequences by Qualitative Scoring. *Genomics, Proteomics & Bioinformatics, Volume 5, Issue 2, 2007, p.121-130*

Luz M. Quiroga, Brian Hilligoss, Javed Mostafa, Zuzana Hlavackova, Leslie Wood, Xin Chen, Shona R. Dippie. Digital libraries for consumer health information (SIG DL). *Proceedings of the American Society for Information Science and Technology, Volume 41, Issue 1, p.571-572, 2004*

Zuzana Hlavackova, Leslie Wood, Xin Chen, Luz Quiroga. Digital Libraries for Consumer Health Information – HIPA project. *ASSIT AM 2004 conference panel (Number 155)*

Xin Chen, David Pager. Extension to the Unit Production Elimination Algorithm. (In preparation)

David Pager, Xin Chen. The Lane Table Method Of Constructing LR(1) Parsers. (In preparation)

David Pager, Xin Chen. Evaluating Terminal Heads Of Length K. (In preparation)

Xin Chen, Pei-Chia Chang. Application of the Minmax Strategy On the Six-Piece Chess Game Implemented in HTML5. (In preparation)

Xin Chen, Guylaine Poisson etc. The GPI-DB database and blasting tool. (In preparation)

Other Conference Presentations:

Xin Chen. Tutorial on LR(1) Parser Generator Hyacc. In the *International Symposium on Code Generation and Optimization (CGO 2012)*, San Jose, March 31-April 4, 2012. (*Accepted*)

Thesis:

PhD dissertation (Computer Science, May 2009): Measuring and extending LR(1) parsing.

Master thesis (Biochemistry, December 2000): The Study of the Properties Of the NADPH Oxidase Using Fluorophore SPQ.

Awards and Prizes

Baidu web app contest, 3rd prize, September 2011 (5504 submitted apps from 4398 participants, 1601 apps admitted. 1 grand prize, 4 1st prizes, 11 2nd prizes, 19 3rd prizes, 56 excellence prizes)

PLDI 2008 student travel award

Services:

Program committee member of *the WORLDCOMP'12 (for the Software Engineering Research and Practice track, Bioinformatics track and AI track)*, Las Vegas, July 16-19, 2012

Session Chair for *the International Conference on Software Engineering Research and Practice, WORLDCOMP'11*, Las Vegas, July 18-21, 2011

References:

David Pager, Professor (Emeritus)
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Yingfei Dong, Associate Professor
Department of Electrical and Computer Engineering
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David Chin, Professor
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Denis Streveler, Professor
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