

# Phil Chu

Technicat LLC

- [technicat.com](http://technicat.com)
- [github.com/technicat](https://github.com/technicat)

## EDUCATION

### Bachelors degree in Computer Science and Engineering

Massachusetts Institute of Technology  
1984 - 1988

### Masters degree in Computer Science

Johns Hopkins University  
1991 - 1993

## LANGUAGES

- English (Native speaker)
- Cantonese (Food)
- Korean (Kdrama phrases)

## INTERESTS

- Cats
- Reading
- Viewing
- Learning
- Listening
- Playing



## PERSONAL SUMMARY

Developing software since the 80s



## WORK EXPERIENCE

### working for myself

1999 - Present

[Technicat LLC](#)

Providing consulting and contract software development, self-publishing apps and games.

### working for the man

1988 - 2001

[various](#)

Journeyed through the semiconductor, defense, space, computer graphics, mobile Internet, and video game industries.



## AWARDS

### Leverage for Planning/Scheduling

1999

[Interval Logic](#)

They misspelled my name.

### First Hubble Servicing Mission

1993

[Space Telescope Science Institute](#)

Includes a patch flown on the first Hubble servicing mission. Best workplace award ever.

### Neomar stock certificate

2000

[Neomar](#)

...and all I got was this lousy stock certificate.



## PROJECTS

[Talk Dim Sum](#) - Your dim sum companion. Read about dim sum and learn how to pronounce the dishes. Available on Itch.io and the App Store.

[HyperBow!](#) - Be the ball! A Unity reimplement of the classic bowling game, licensed from Hyper Entertainment. Available on Itch.io, Steam, and the App Store.

[Cinefex iPad Edition](#) - An iPad reader for the Cinefex visual effects magazine, with extras such as videos and image galleries. Kept it up and running over the march of iOS evolution, fixing, updating, and optimizing in-app purchases, user interface, video...

[Emo-Ray vs. the Intergalactic Teddy Bears](#) - A Playstation Home driving/shooting game with alien invader teddy bears.

[RC Rally](#) - A Playstation Home multiplayer racing game.

[Blue Mars](#) - A 3D virtual world implemented in CryEngine. Supported third-party developers, documented the Lua API and framework for creating minigames on the community wiki (a CryEngine wiki even copied part of it!), tweaked physics, updated Scaleform integration, modified CryEngine to work with Scaleform IME (for localization).

[Nendo](#) - A nifty 3D modeler originally developed at Nichimen Graphics. Updated to work on Windows XP.

[Darkwatch](#) - A vampire western for Playstation 2 and Xbox. Worked on various HUD elements, PAL support, demo builds, implemented multiplayer split-screen, added designer-friendly Lua interfaces for audio, health bars, etc.

[Fugu Games](#) - Small games released as webplayers, Mac widgets, and mobile apps.

[Tech Deck: Bare Knuckle Grind](#) - A skateboarding game bundled with Tech Deck figures. Implemented installers, dynamic shadows, video, a build system.

[HyperBowl](#) - A 3D bowling game, rolling in fanciful locations. Took over for the original lead programmer, updated attraction version of HyperBowl for localization, new lanes, optimization, new graphics cards, arcade and PC support.

[Neomar](#) - One of the first mobile web browsers, conforming to the WAP standards. Implemented an HTTP proxy for the Neomar WAP gateway, supporting the Neomar mobile web browser on Blackberry pagers and Palm devices.

[Leverage for Scheduling](#) - Supply chain scheduling software for semiconductor fabs. Managed the group responsible for installation, XML interoperability, and user interfaces.

[Leverage for Planning](#) - Supply chain planning software for semiconductor fabs. Upgraded from Tcl to TclPro.

[Mirai](#) - Successor to N-World. Fixed some code and visited 3D hardware vendors in Silicon Valley to get test cards and chat about OpenGL.

[N-World](#) - A 3D modeling and animation package. Ported from IrisGL to OpenGL on SGI workstations, then from Irix to Windows NT, all in Franz Allegro Common Lisp (and a bit of C). Manager of core software group (all the libraries - graphics, audio, UI, security...)

[ORBIS](#) - An expert system for submarine simulation. Added multiplayer network capability to support participation wide area networked exercises.

[Proposal Entry Processor](#) - A syntax-directed Emacs mode used by astronomers and Institute staff to prepare and edit Space Telescope observation proposals.

[Database Accelerator](#) - A computer architecture based on content-addressable memories. Implemented compilers and simulators and simulations for the Database Accelerator and Content-Addressable Parallel Processor.

[DROID](#) - A VLSI layout synthesis tool, used in-house to design new products, running on TI Explorer Lisp Machines. Added optimizations and other improvements, skipped most of the meetings (also an optimization).

[Multilisp](#) - Bachelors thesis project implementing an Othello game in Multilisp (Multello) to run on the Concert 32-processor computer, trying various parallelism strategies to compare processor utilization and final performance.

[START](#) - Part time student work on a graph display for the the START natural language parser, then running on Symoblics Lisp machines.



## PUBLICATIONS

[Learn Unity 2014 for iOS Game Development](#)

2013  
Apress

Introduction to mobile game development with the Unity game engine.

## Technicat on Software

2014  
self

Collection of software development essays.



## SKILLS & PROFICIENCY

### App Development



### Game Development



### Graphics



### Programming



### Writing



Designed with by [Xiaoying Riley](#) for developers