

# Phil Chu

## Technicat LLC

Las Vegas, Nevada, US

Developing software since the 80s

## Experience

### working for myself

[Technicat LLC](#)

Jan 2000 - Present

Consulting and contract development, self-publishing apps and games.

### working for the man

[various](#)

Jun 1988 - Jun 2001

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

## Projects

### Developer and publisher

[Talk Dim Sum](#)

Jan 2014 - Present

Your dim sum companion. Read about dim sum and learn how to pronounce the dishes. Available on Itch.io and the App Store.

### Developer, publisher and licensee

[HyperBowl](#)

Dec 2008 - Dec 2019

Be the ball! A Unity reimplement of the classic bowling game, licensed from Hyper Entertainment.

- One of MacLife's Greatest iPhone Apps of 2009
- Available on the App Store and Steam
- Formerly available on the Amazon Appstore, Nook store, Itch.io, and various crappy app stores (craappstores?)

### Developer

[Cinefex iPad Edition](#)

Apr 2016 - Present

An iPad reader for the Cinefex visual effects magazine, with extras such as videos and image galleries.

- Facilitated transfer from original developer to Cinefex LLC
- Fixed in-app-purchase issues
- Updated video player after Apple dropped support for previous API
- Updated issue download code after Apple dropped support for previous API (notice a trend?)
- Optimized startup time and browsing
- Updated to comply with ever-changing Apple requirements

### Programmer

[Emo-Ray vs. the Intergalactic Teddy Bears](#)

Sep 2011 - Dec 2011

A Playstation Home driving/shooting game with alien invader teddy bears.

- Implemented collision physics among cars
- Programmer credit displayed in-world

### Programmer

[RC Rally](#)

Sep 2011 - Dec 2011

A Playstation Home multiplayer racing game.

- Made some UI fixes just before release

## Skills

App Development	Programming 6502
Flutter	BASIC
J2ME	C
SwiftUI	C++
Xamarin	C#
	Dart
Game Development	Java
	Javascript
CryEngine	Lisp
Godot	Lua
Havok	Objective-C
Qube	Perl
Renderware	PHP
Ren'py	Python
Scaleform	Swift
Unity	Tcl
Unreal	
Graphics	Writing
Direct3D	English books
OpenGL	press releases
Processing	

## Education

Masters degree, Computer Science  
[Johns Hopkins University](#)

Bachelors degree, Computer Science and Engineering  
[Massachusetts Institute of Technology](#)

High school degree, Iowa  
[West Senior High School](#)

## Certificates

[Neomar stock](#)  
Neomar

## Awards

Leverage for Planning/Scheduling  
Interval Logic  
They misspelled my name.

<b>Programmer</b> <a href="#">Blue Mars</a> A 3D virtual world implemented with CryEngine. <ul style="list-style-type: none"> <li>· Documented the Lua API and framework for creating minigames on the community wiki (a CryEngine wiki even copied part of it!)</li> <li>· Integrated newer versions of Scaleform, including Scaleform IME for localization</li> <li>· Tweaked CryEngine physics to support an in-world golf game</li> <li>· Attended in-world developer meetings. Better than Zoom.</li> </ul>	Sep 2007 - Jan 2011	Maritime Simulation Demonstration ARPA They misspelled my name, too.  First Hubble Servicing Mission Space Telescope Science Institute Includes a patch flown on the first Hubble servicing mission. Best workplace award ever. And they got my name right.
<b>Programmer</b> <a href="#">Nendo</a> A nifty 3D modeler originally developed at Nichimen Graphics. <ul style="list-style-type: none"> <li>· Updated to work on Windows XP.</li> </ul>	May 2007 - Invalid date	
<b>Programmer</b> <a href="#">Darkwatch</a> A vampire western for Playstation 2 and Xbox. demo builds. <ul style="list-style-type: none"> <li>· Worked on HUD elements for health, ammo, special powers</li> <li>· Implemented split-screen (multiple Renderware cameras) for multiplayer</li> <li>· Added PAL support</li> <li>· Integrated Lua scripting for audio effects and HUD elements</li> <li>· Received programmer credit (but oddly required to list city of birth)</li> </ul>	Sep 2006 - Invalid date	<b>References</b>  Former client <i>"I still think you're a good programmer."</i>  Prospective client <i>"I've got a genius app idea!"</i>
<b>Developer</b> <a href="#">Fugu Games</a> Small games released as webplayers, Mac widgets, and mobile apps. <ul style="list-style-type: none"> <li>· Fugu Maze, a suspense maze walkthrough that got twenty thousand downloads on the App Store in the first week and then a trickle after I started charging for it</li> <li>· Fugu Bowl, a simple proof of concept for HyperBowl that got low ratings but was my most downloaded app (until Apple rejected upgrades).</li> </ul>	Jun 2007 - Present	<b>Languages</b>  English · Native speaker Cantonese · Food Korean · Kdrama phrases
<b>Programmer</b> <a href="#">Tech Deck: Bare Knuckle Grind</a> A skateboarding game bundled with Tech Deck figures. <ul style="list-style-type: none"> <li>· Implemented installers so each game could be packaged separately and installed in any sequence</li> <li>· Added dynamic shadows to replace the placeholder blob shadows (and then switched back to the blob shadows because the art director liked them better)</li> <li>· Set up a push-button scripted build system so the producers could create a latest build from the subversion source at any time</li> </ul>	Dec 2003 - May 2004	<b>Interests</b>  Cats Reading Viewing Learning Listening Playing
<b>Programmer</b> <a href="#">HyperBowl</a> A 3D attraction bowling game, rolling in fanciful locations. <ul style="list-style-type: none"> <li>· Added localization support, particularly for Jillian's installations in Montreal (French)</li> <li>· Implemented support for (potential) new lanes, e.g. a toy room, motocross slope...</li> <li>· Profiled, optimized (those lanes kept getting bigger and bigger)</li> <li>· Fixes for new graphics cards (pesky w-buffer...)</li> <li>· Changes to facilitate arcade and PC versions (I'm there in the mobygames credits)</li> </ul>	Jan 2001 - Invalid date	<b>Links</b>  <a href="http://technicat.com">technicat.com</a> <a href="https://github.com/technicat">github.com/technicat</a> <a href="mailto:universeodon.com">@technicat</a>
<b>Programmer</b> <a href="#">Neomar</a> One of the first mobile web browsers, conforming to WAP standards. <ul style="list-style-type: none"> <li>· Implemented an HTTP proxy in Java for the Neomar WAP gateway</li> <li>· Launched on Motient's Blackberry service</li> <li>· Company assets acquired by Good Technology</li> </ul>	Dec 1999 - Jul 2001	
<b>Programmer</b> <a href="#">Leverage for Scheduling</a> Supply chain scheduling software for semiconductor fabs. Managed the group responsible for installation, XML interoperability, and user interfaces.	Dec 1998 - Dec 1999	

## Programmer

Nov 1998 - Invalid date

### Leverage for Planning

Supply chain planning software for semiconductor fabs. Upgraded from Tcl to TclPro.

## Consultant

Sep 1997 - Sep 1997

### Mirai

Successor to N-World

- Fixed some graphics code (which I eventually realized was originally written by me)
- visited 3D hardware vendors in Silicon Valley (including a young nVidia) to get test cards and
- discuss OpenGL issues
- Used to make Gollum in the Lord of the Rings movies.

## Programmer

Dec 1995 - Jun 1997

### N-World

A 3D modeling and animation package descended once upon a time from the Symbolics Graphics Group (written in Lisp, shhh!).

- Ported from IrisGL to OpenGL on SGI workstations
- Ported from Irix to Windows NT
- Manager of Core Software (I made up the title)
- Used in the making of Mario 3D.

## Programmer

Dec 1992 - Dec 1993

### ORBIS

An expert system for submarine simulation.

- Added support for local area network simulations (i.e. games)
- Added Distributed Interactive Simulation support for wide-area network simulations (wargames)
- Donned a submarine uniform and took part in two exercises like I was in The Hunt for Red October

## Programmer

Nov 1990 - May 1992

### Proposal Entry Processor

A syntax-directed Emacs mode used by astronomers and Institute staff to prepare and edit Space Telescope observation proposals.

- A member of the proposal preparation staff (but alas, no takers).  
asked for my project to be continued after I left

## Programmer

Oct 1989 - Oct 1990

### 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.

## Programmer

May 1988 - Sep 1989

### 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).

## Student

Sep 1987 - May 1988

### 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.

- Wrote the thesis in LaTeX on a Symbolics Lisp Machine.
- Cited in a PhD thesis.

## Student

Jun 1987 - Aug 1987

### START

Part time student work on a graph display for the the START natural language parser, then running on Symbolics Lisp machines.

## Publications

### **Learn Unity 2014 for iOS Game Development**

Apress

Introduction to mobile game development with the Unity game engine.

Jun 2013

### **Technicat on Software**

self

Collection of software development essays.

Jan 2015