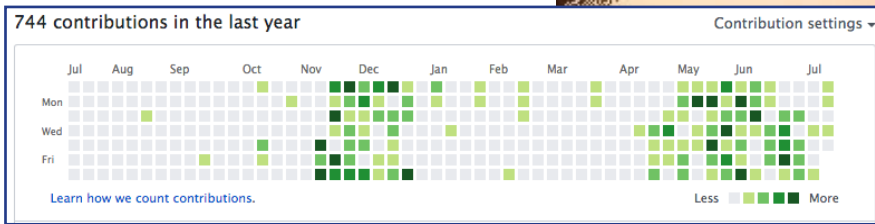
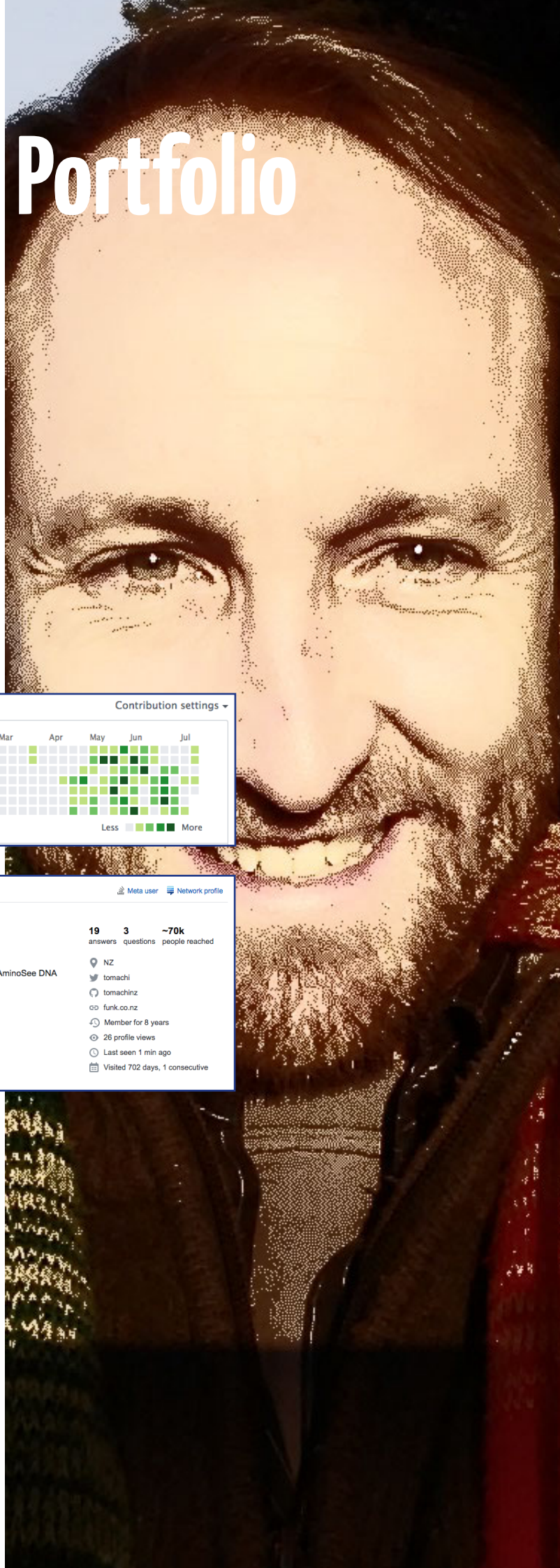
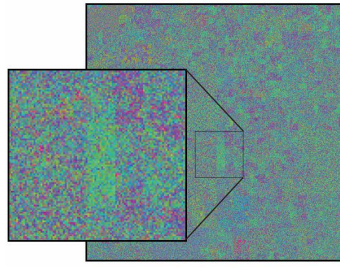



# Code Portfolio



Profile Activity Developer Story Edit profile and settings Meta user Network profile



**Tomachi** top 19% this year  
Fullstack Developer at Tomachi Corporation

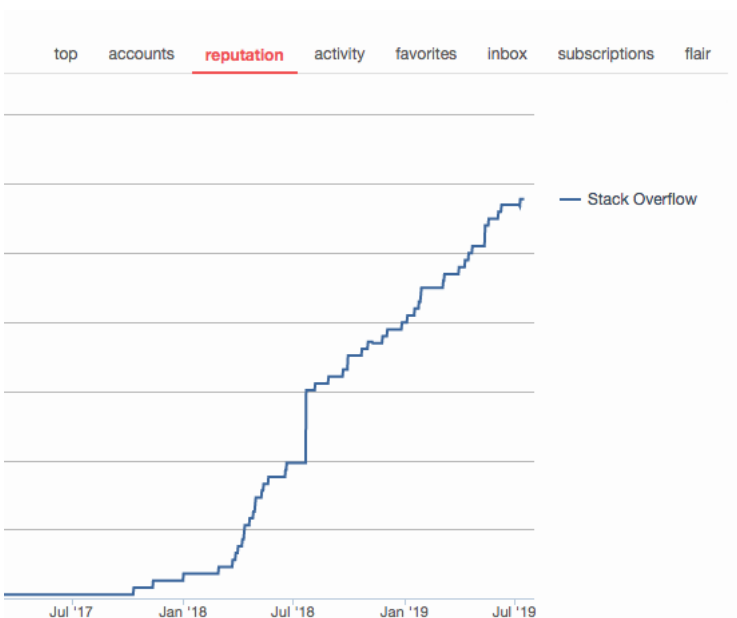
Drummer Composer Producer Designer Coder Inventor of the AminoSee DNA Viewer International Recording Artist "Tomachi"

**577** REPUTATION

5 9

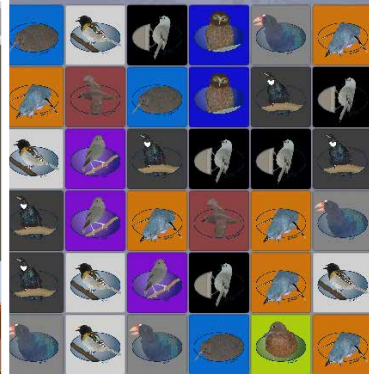
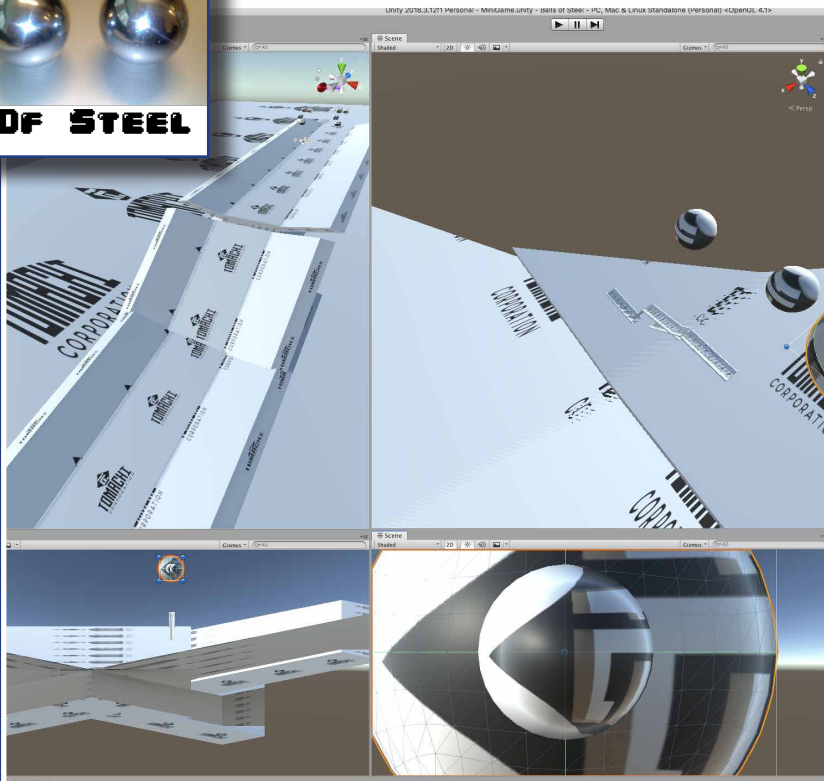
**19** answers **3** questions **~70k** people reached

- NZ
- tomachi
- tomachinz
- funk.co.nz
- Member for 8 years
- 26 profile views
- Last seen 1 min ago
- Visited 702 days, 1 consecutive



# Unity Game Development

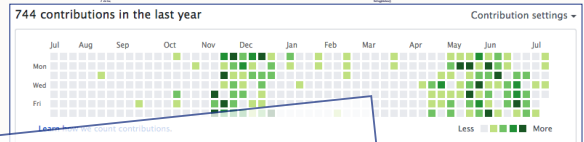
funk.nz/ballsOfSteel  
 funk.nz/mytona <--- includes  
 source code / interview demo



For an interview demo, a "Bejewelled Clone" was made in a 2 week race. Logic is required to randomise the board, then also ensure there are no immediate matches, but that there are also matches that are a single move away.

# DNA Science Project

20,000 lines and 744 commits on Github

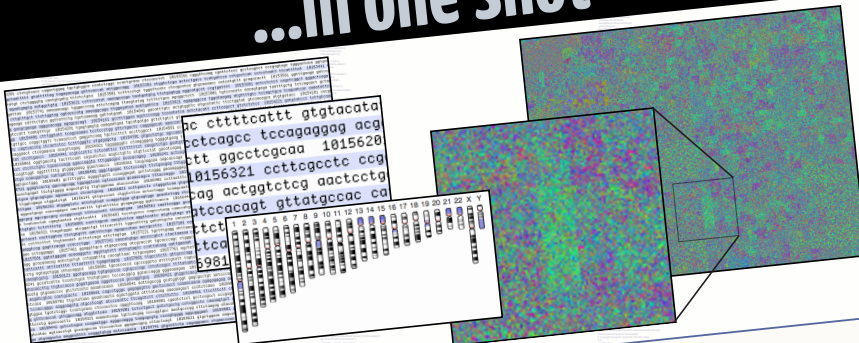


## AminoSeeNoEvil

DNA Viewer by Tom Atkinson - aminosee.funk.nz



The goal: Visually represent an entire genome graphically  
 ...in one shot





# Webmail Detection Regex

This single line program - a well crafted regular expression I wrote - can tell you if nearly any domain you give it is one of the big webmail providers: gmail, yahoo, mail.de, mail.ru, outlook.com etc Useful for discovering the impact of "word of email" marketing (via Google analytics re-write) <https://www.funk.co.nz/blog/online-marketing/webmail-referral-source-medium-rollup-filter>

~ starts with

(messag|courrier|zimbra|^imp|mail)

.\*\.(.\*{2,4})

go\.mail\.ru|promail\.co\.nz|

service\.mail\.com|3c\.web\.de|mail\.live\.com|outlook\.com)

literal dot

logical OR

Output To -> Constructor

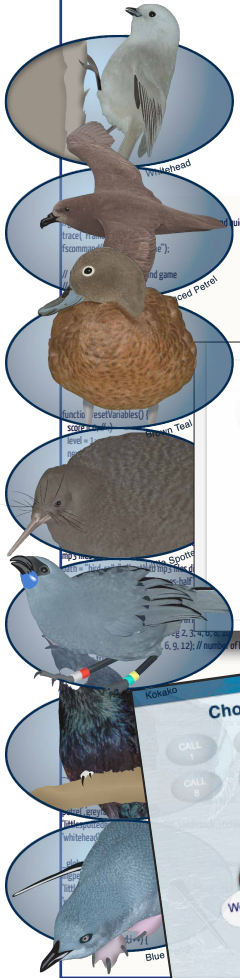
Campaign Source

Webmail (\$A2.\$A3)

obvious web mail keywords in domain

Either mail.whatever.com OR web.de

and some hard-coded cases



# Bird Call Memory Game - funk.nz/tiri

Game logic inception and production in Flash ActionScript

```
eval("a+=").debug = fileNamesArray[1-1]; // bird 1 is called "a1"
eval("a+=").bird = fileNamesArray[1-1]; // bird 1 is called "a1"
eval("a+=").num = i; // loop starts from 1
hScoreTable[i] = i; // wipe the highscore table

//eval("a+=").solved = true; // cheat code
}

// initialise solved audio buttons
//initialiseSolved();
```

```
}
//eval("BirdsDisplay.* = imageClicked).lbl.SpeechText.speech
= "Howzit!";
trace("imageClicked = imageClicked * points = p);
}

function playCorrectBirdSound() {
// PLAY THE AUDIO FOR THE AUDIO BUTTON CLICKED BIRD
eval("a+=").movie_sound.start(0.5); // start from 0, repeat 5 times.
}

addScore(pointMultiplier * 0.1); // subtract ten points
eval("BirdsDisplay.* = objectClicked).gotoAndPlay(wrong);
BirdsDisplay.whichBird = "Wrong, choose another";
talkBackText = "Wrong, choose another"
if (level > 1) {
level--;
numImages = levelArray[level];
//line removed:
//BirdsDisplay.createNewFrame(); // self explanatory my man!!
```

```
// initialise solved audio buttons
initialiseSolved();
trace("Running level 1 Script");
state = "start";
stop();
stopAllSounds();
initialiseSolved();

stop();
//Trace(BirdsDisplay.b1.bird);

talkBackText = "Touch the bird that makes this sound!"

// not sure what this does, probably safe to remove
BirdsDisplay.b1.bird = birdArray[0];
BirdsDisplay.b2.bird = birdArray[1];
BirdsDisplay.b3.bird = birdArray[2];

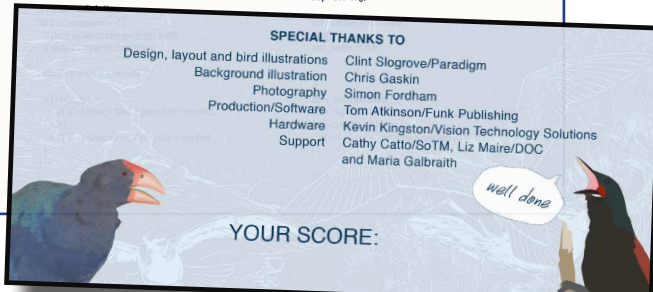
BirdsDisplay.gotoAndStop(level * 10); // for some weird reason i could
figure out why flash wasn't going to my frames labeled "1", "2" and so on
so we opted to just use the actual frame numbers, 10 apart, hence the x 10!

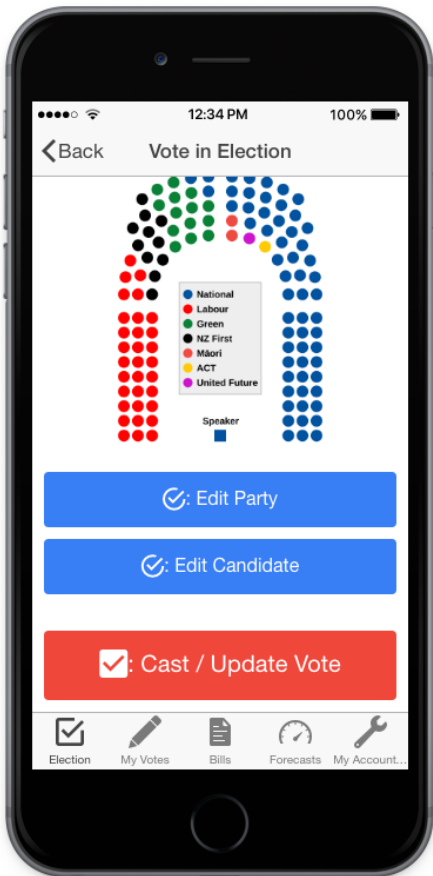
//Trace("BirdsDisplay.gotoAndPlay(level)"); // level:
//initialiseSolved();
gotoAndPlay(level);
stop();

gotoAndPlay(showBirds);
function stopAll() {
for (i=1; i<=numLevels; i++) {
eval("a+=").gotoAndPlay("Tinhoh"); // animate button disappear
}
stopAllSounds();
}
```

**John Ringer**  
 Owner, Paradigm Associates  
 Ltd  
 June 22, 2010, John was a client  
 of Tom's

Paradigm has worked with Tom for a number of years. Recently Paradigm commissioned Tom to develop a children's touch screen game for the Tiritiri Matangi visitor centre, which has been enthusiastically received by visitors to the island. Tom did the job to tight deadlines, did it well, and to a very tight budget. We recommend Tom to anyone looking for solutions to challenging interactive software, in fact pretty well anything you can throw at him. John Ringer, Director, Paradigm Associates Ltd, Auckland





# awaken.guru

Example of rapid app prototype development using the Ionic Creator drafting tool.

64 lines (63 sloc) 2.23 KB

```

1 {
2   "name": "awaken-direct-democracy",
3   "version": "0.1.6",
4   "description": "This is the functional skeleton / working mock up of a disruptive app to in
5   "keywords": ["direct", "democracy", "open-source", "blockchain", "ethereum"],
6   "license": "Apache-2.0",
7   "repository": {
8     "type": "git",
9     "url": "https://github.com/tomachinz/awaken-direct-democracy.git"
10  },
11  "author": {
12    "name": "Tom Atkinson",
13    "email": "tom@awaken.guru",
14    "url": "https://tomachi.co/"
15  },
16  "scripts": {
17    "build": "ionic-app-scripts build",
18    "watch": "ionic-app-scripts watch",
19    "serve:before": "watch",
20    "emulate:before": "build",
21    "deploy:before": "build",
22    "build:before": "build",
23    "run:before": "build"
24  },
25  "dependencies": {
26    "@angular/common": "^2.0.0",
27    "@angular/compiler": "^2.0.0",
28    "@angular/compiler-cli": "0.6.2",
29    "@angular/core": "^2.0.0"

```

## awaken.guru/docs/replicate (YouTube video)

Listen to Tom explain how to clone the Ionic Creator project. Get a feeling for his command of the Mac OS terminal and his home dev environment.

### How to replicate the Awaken Ionic wireframe



#### Run on your desktop

To install and get this serving locally, first [install Ionic](#), then use this command at the prompt:

```

ionic start awaken-wireframes creator:1039f0d8e2f
cd awaken-wireframes
ionic setup sass
ionic serve

```

Then visit <http://localhost:8100/> in your web browser to see the web app running on your local machine complete with database and all.

Search

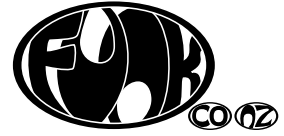
#### STATIC HTML DEMO





Welcome to **The Funk!**

Media design portfolio of the one like TOMACHI  
Drummer Composer Producer Designer Coder



My flagship portfolio site  
HTML, CSS, Javascript animations  
Everything hand built including the logo

### Current bands:



Tomachi



The Triptonites



Youtube.Funk.NZ

Upcoming Gigs - Auckland Music Update  
Band Friendly Storage Units and Practice Space  
Auckland

Quick Garage Sale Before Moving

New instrumental self-leak: Shanky Funk non-  
mix

Deviate heads

Subscribe!!!

email address

Subscribe

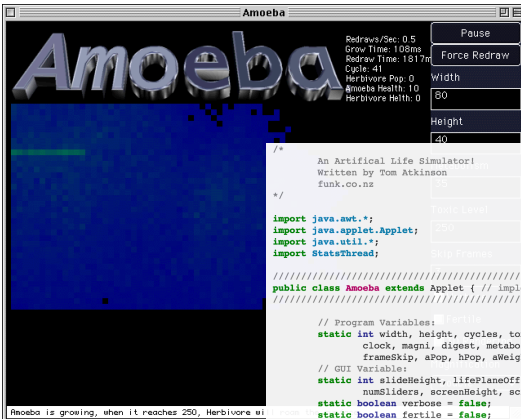
```

1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Funk NZ - Portfolio of Tom Atkinson, Tomachi, session drummer in Auckland</title>
5 <link rel="shortcut icon" href="favicon.ico">
6 <meta name="description" content="View Upcoming Gigs, Subscribe to Auckland Music Update gig guide, read The F
7
8
9
10 <!-- WASSUP NICE TO SEE YOU. ALL YOUR BASE ARE BELONG TO US.
11 etag is a crc32 blog content: "1500275137-1300196226" - Band Friendly Storage Units and Practice Spaces in Auc
12
13 $$$$$$
14 $$$$$$
15 $$$$$$
16 $$$$$$
17 $$$$$$
18 $$$$$$
19 $$$$$$
20 $$$$$$
21 $$$$$$
22 $$$$$$
23 $$$$$$
24 $$$$$$
25 $$$$$$
26 $$$$$$
27 $$$$$$
28 $$$$$$
29 $$$$$$
30
31 -->
32
33 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
34 <meta name="viewport" content="width=device-width, initial-scale=1">
35 <meta property="og:title" content="Funk.NZ - Portfolio of Tom Atkinson, Tomachi, drummer for The Triptonites, Da
36 <meta property="og:type" content="website">
37 <meta property="og:url" content="http://www.funk.co.nz/">
38 <meta property="og:image" content="http://www.funk.co.nz/images/nav/funk-logo-3-glowing-120px.gif">
39 <meta property="og:site_name" content="Funk NZ - home of Tomachi Corp, drummer for The Triptonites, Dam Native,
40 <meta property="fb:admins" content="tomachinz">
41 <meta property="fb:page_id" content="136739013065213">
42 <meta property="og:description" content="Funk NZ - home of Tomachi Corp, drummer for The Triptonites, Dam Native
43 <script type="text/javascript">
44 WebFontConfig = {
45   google: { families: [ 'Lobster::latin', 'Lobster+Two::latin', 'Yanone-Kaffeesatz::latin' ] }
46 };
47 (function() {
48   var wf = document.createElement('script');
49   wf.src = 'https://ajax.googleapis.com/ajax/libs/webfont/1/webfont.js';
50   wf.type = 'text/javascript';
51   wf.async = 'true';
52   var s = document.getElementsByTagName('script')[0];

```

# funk.co.nz/amoeba (AWT Java Applet)

Artificial Life simulator written as a Java applet  
Done as part of Auckland University Computer Science paper



```

/*
 * Amoeba
 * An Artificial Life Simulator!
 * Written by Tom Atkinson
 * funk.co.nz
 */
import java.awt.*;
import java.applet.Applet;
import java.util.*;
import javax.swing.*;

public class Amoeba extends Applet { // implements Runnable

    // Program Variables:
    static int width, height, cycles, toxic, dx, dy, herbGestation,
    clock, magni, digest, metabolism, childHealth, divisionTax,
    frameSkip, aPop, hPop, aWeight, hWeight, aHealth, hHealth;

    // GUI Variables:
    static int sliderHeight, lifePlaneOffset, lifePlaneOffsetLeft,
    numSliders, screenHeight, screenWidth, sleepAmount, sleepCount, offset3D;

    static boolean verbose = false;
    static boolean fertile = false;
    static boolean running = false;
    static boolean needsBlack = true;
    static boolean needsArrayChange = false;
    static boolean isBooting = true;
    static boolean isFinished = false;
    static boolean is3DMode = false;
    static boolean hasExploded = false;
    static int [][] cell;
    static int[] seasonLimits = { 40, 41 }; // Point at which fertile reverses.

    // Temporary:
    static String sentence, temp, status; // status is the browser status bar.
    static int tmp;

    static long ctm; // System.currentTimeMillis()
    static long drawTime; // Time for drawLifePlane in Millis.
    static long growTime; // Time for growLife in Millis.

    // GUI DECLARATIONS
    Panel p = new Panel();
    static int panelWidth;

    Color col = new Color( 0, 0, 0 );

    GridBagLayout gridBag = new GridBagLayout();
    GridBagConstraints c = new GridBagConstraints();

```

```

public void amoebaPause() {
    System.out.println("*** Trying to Pause...");
    running = false;
    pauseBut.setLabel( "Resume" );
    stateClock.suspend();
} // end of amoebaPause

public void amoebaResume() {
    System.out.println("*** Trying to start up again...");
    running = true;
    pauseBut.setLabel( "Pause" );
    stateClock.resume();
} // end of amoebaResume

public static void changeSize( int x, int y ) {
    System.out.println( "Changing the life array size...");

    int z = 6; // the smallest dimension allowable.
    if ( y < z ) y = z;
    if ( x < z ) x = z;

    int[] tempCell = new int[ x ][ y ];
    int q;

    System.out.println(
        "Old Size: " + width + " x " + height + "\n" +
        "New Size: " + x + " x " + y );

    //Copy the old Amoeba out:
    for ( int ay = 0; ay < y; ay++ ) {
        for ( int ax = 0; ax < x; ax++ ) {
            q = 0;
            if ( ax < width - 1 && ay < height - 1 ) {
                q = cell[ ax ][ ay ];
            }
            tempCell[ ax ][ ay ] = q;
        }
    }
    tempCell[ 2 ][ 2 ] = 1; // Seed it just in case.
    cell = tempCell;
    width = x;
    height = y;
    fixSize();
}

```

This is the gnarliest piece of triple-system glue-code I wrote for The Rock Factory powers the Zapier "code-free" business automation platform. It syncs users between their WordPress WooCommerce site, to Zapier, and over to CurrentRMS CRM and Google docs.

The screenshot shows a Google Docs interface. The document title is "Summer to Autumn 2020 :: The Rock Factory Seasonal Report". The document content includes:

- A link to "Sennheiser MKE-600" with the URL <https://en-nz.sennheiser.com/mke-600>.
- A date "Wednesday 29 January".
- A highlighted section header: "New record: Two Zaps in one day! Google + Woo User Zap".
- A paragraph: "Google form zapier has been tidied up. Using "message" seems to crash things, due to line break. The new LIVE zap code is:"
- A code block containing a JSON object with fields like "member", "description", "membership\_type", "tag\_list", "lawful\_basis\_type\_id", "lawful\_basis\_type\_name", "membership", "phones", and "links".
- A section header: "Live New Woo User Zap code...".
- Another code block containing a JSON object with fields like "member", "description", "membership\_type", "tag\_list", "lawful\_basis\_type\_id", "lawful\_basis\_type\_name", "membership", "phones", and "links".