

# Crypto-Metaprogramming: alternative to Model-View-Controller Architecture

## Abstract:

We continue from the previous presentation to establish Crypto-Metaprogramming as an alternative to the conventional Model-View-Controller architecture. In conventional MVC, front end to back end communications employ public key cryptography but the key pair is not available at the disposal of the user or programmer. We change this scheme, with many benefits, starting with simplifying designs of a large range of applications.

[omnixtar.github.io/svfig](https://omnixtar.github.io/svfig)

<https://www.youtube.com/@mi4metaprogramminginforth666>

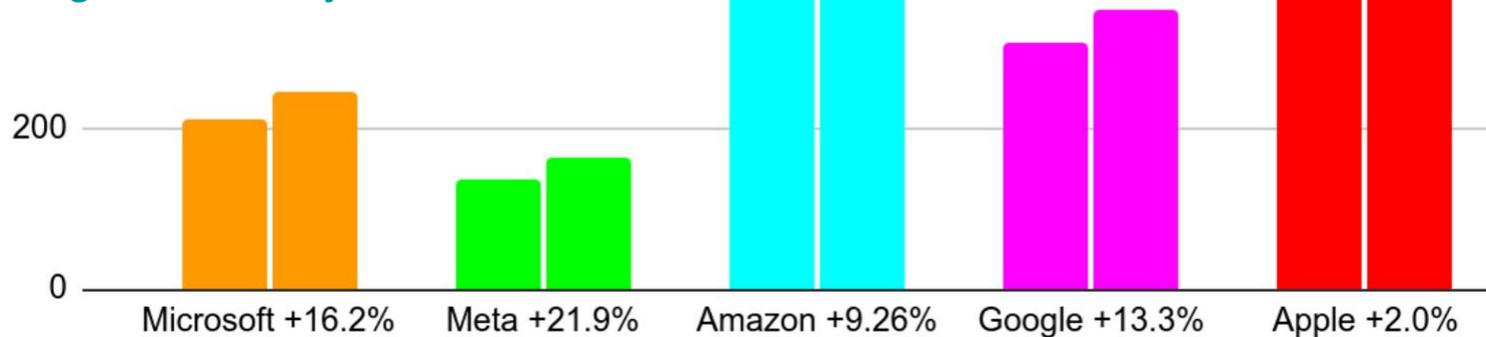
# MMAGA Revenues 2023/24 (USD billions)

Total 2024: USD 1.776 Trillion (+10.27%)



Why  
Crypto-  
Metaprogramming?

<https://omnixtar.github.io/why/>



This presentation is slightly different from conventional technical presentations in that, we attempt to demonstrate how technical innovations may lead to social changes like French Revolution, which may be deemed politically incorrect by mainstream American audience.

As such, we employ analogies from Isaac Asimov's Foundation fiction universe, to illustrate how programmers may form one or more organisations and use Crypto-Metaprogramming to change the world, just like how Psychohistorians form one or more Foundations, and take actions to direct the course of Empire.

And we wish to invoke the Monty Python Disclaimer, to defend ourselves from political correctness accusations, where we urge all audience to consider unpopular and ridiculous ideas as future Monty Python plots.

• ISAAC ASIMOV  
FOUNDATION



Foundation

Omni\*Web

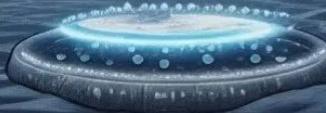


Psychohistory

CRYPTO METAROGRAMMING

METANARCHY

EMPIRE



1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)

# Abstract

We begin with defining Crypto-Metaprogramming as “Bitcoin, simplified, minus Blockchain”. We then employ Hilbert Hotel room number to illustrate the significance of hash numbers and Hashcodes, and further employ Hilbert Casino and Hilbert Bazaar to illustrate decentralised digital assets, as well as using Hilbert Casino and Hilbert Bazaar as a generalised model for all computing applications. We then introduce the concept of Decentralised Legal Persona and Metanarchy, and argue that MMAGA (Microsoft, Meta, Amazon, Google, Apple) USD 1.8 trillion annual revenues should be imposed “open source tax”, and better free software can be produced by collaboration, using Omnihash and DJSON Decentralised JSON. We also predict and propose to simulate our prediction using Omni\*Web itself, of a world made up of Three Kingdoms, namely, United States of America, China and Metanarchy Federation, comprising all other nation states, from 2030 onwards.

# Crypto-Metaprogramming

=

Bitcoin, simplified,  
minus blockchains.

**Bitcoin: Technical Concepts**

Bech32  
Blockchain Diagram

Bitcoin Encryption

Creating forks

Bitcoin mining

Blockchain

Bitcoin Improvement Proposals

Pay-to-Script Hash

Proof of Keys

UTXO

User Activated Soft Fork

OmniBOLT

Blockchain (database)

Segregated Witness

Lightning Network

Hashed Timelock Contracts

NSequence

Bitcoin Emission

Block timestamp

**Pay-to-PubKey-Hash (Pay-to-Public-Key-Hash, P2PKH)** is the basic form of making a transaction and is the most common form of transaction on the [Bitcoin network](#). Transactions that pay to a [Bitcoin address](#) contain P2PKH scripts that are resolved by sending the public key and a digital signature created by the corresponding [private key](#).

The ScriptPubKey and ScriptSig for a transaction is shown below:

**Table of Contents**

1. Pay-to-Pubkey Hash
  - 1.1. Pay-to-PubKey-Hash Review
  - 1.2. Pay-to-PublicKey Hash Example
  - 1.3. See also
  - 1.4. References

<https://bitcoinwiki.org/wiki/pay-to-pubkey-hash>

## Pay-to-PubKey-Hash Review

Two types of payment are referred as P2PK (pay to public key) and P2PKH (pay to public key hash).

Satoshi later decided to use P2PKH instead of P2PK for two reasons:

Elliptic Curve [Cryptography](#) (the cryptography used by your public key and [private key](#)) is vulnerable to a modified Shor's [algorithm](#) for solving the discrete logarithm problem on elliptic curves. In plain English, it means that in the future a quantum computer might be able to retrieve a private key from a public key. By publishing the public key only when the coins are spent (and assuming that addresses are not reused), such attack is rendered ineffective.

With the hash being smaller (20 bytes) it is easier to print and easier to embed into small storage mediums like



works  
Softfork  
Scalability  
Adaptive difficulty  
CVE-2012-4684-new

CVE-2013-2293

Nanopayments

Block weight

BIP UNOFFICIAL DRAFT 0

Ideal Properties of Digital Commodities

Address reuse

Hashlock

Contingency plans

Offline transactions

Off-Chain Transactions

Funding network security

Bitcoin scalability problem

Segwit support

CVE-2012-3789

Proof of Ownership

Dump format

Test Cases

Hot wallet

Dominant Assurance Contracts

Bitcoin Binary Data Protocol

Coin analogy

CVE-2012-4683

BIP Draft – Instant Partial

A [Bitcoin address](#) is only a hash, so the sender can't provide a full public key in scriptPubKey. When redeeming coins that have been sent to a [Bitcoin address](#), the recipient provides both the signature and the public key. The [script](#) verifies that the provided public key does [hash](#) to the hash in scriptPubKey, and then it also checks the signature against the public key.

Checking process:

Stack	Script	Description
Empty.	<sig> <pubKey> OP_DUP OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	scriptSig and scriptPubKey are combined.
<sig> <pubKey>	OP_DUP OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	Constants are added to the stack.
<sig> <pubKey> <pubKey>	OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	Top stack item is duplicated.
<sig> <pubKey> <pubHashA>	<pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	Top stack item is hashed.
<sig> <pubKey> <pubHashA> <pubKeyHash>	OP_EQUALVERIFY OP_CHECKSIG	Constant added.
<sig> <pubKey>	OP_CHECKSIG	Equality is checked between the top two stack items.
true	Empty.	Signature is checked for top two stack items.

1. Discovered by accident, PBK login video, show again.
2. DJSON video. Login. [https://youtu.be/\\_w-E4Z4Ju5s?t=250](https://youtu.be/_w-E4Z4Ju5s?t=250) Hash of public key.

yo6sgmfq7pfvpv2e4kcuhtfg X yo6sgmfq7pfvpv2e4kcuhtfg X +

https://yo6sgmfq7pfvpv2e4kcuhtfg7wfllt63igwcuuhbmum6lu3a3a.b32.i2p/oxm/oxm.php?nn=adam

170%



adam session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31  
session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

## Omni\*Search Demo

Copy the following code and execute it in

f(): B\_F + JSON.stringify({w:'like', t:'recipi

1602 Phos 1611 S 1621 B\_F start omni:

fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
'lcdw:', 5 => 'B\_AUTH', ), 1 => array ( 'SP'  
'LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS  
'NN' => 'adam', ), )

fgl\_s 340 < 4 > array ( 0 => array ( 0 => '{  
["SESSION:", "AUTH", "i:", "PBK", "i:", "o\_has":  
1 => 'jd:', 2 => 'cdw:', 3 => 'am:', 4 => 'lcdw:  
array ( 'a\_cmd' => array ( 0 => 's:', 1 => ';' )  
'Graph/dmeta/CXAGcRKevA==', ) [ "a\_cm

{ "r": "Graph/dmeta/CXAGcRKevA==", "t": "  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
'lcdw:', 5 => 'B\_AUTH', ), 1 => NULL, )

fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
"B\_AUTH": ["SESSION:", "AUTH", "i:", "o\_has:",  
"jd:", "cdw:", "am:", "lcdw:" ], 5 => 'B\_AUTH'  
) 1 => array ( 'SP' => 'e3235b7f', 'PASS' =>  
'20250211\_220742', 'PBK' =>

⊕ https://yo6sgmfq7pfvpv2e4kcuhtfg7wfllt63igwcuuhbmum6lu3a3a.b32.i2p

post ajax:  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
"B\_AUTH":  
["SESSION:", "AUTH", "i:", "o\_has:",  
"jd:", "cdw:", "am:", "lcdw:" ], 5 => 'B\_AUTH'  
) 1 => array ( 'SP' => '93b164de', 'PASS' =>

'20250211\_220742', 'PBK' =>  
'LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS0tLS0tKUljQ0lqQU5CZ2txaGt  
pRzI3MEJBUUVGQUFQ0FnOEFSNlDQ2dLQ0FnRUFyUlR1TWJCL3NS  
c2dXmNSeGhOUDjLWkNVRkJkdERSVXV1b3oZSC9XT05nYU1QWExG  
NHVwZFNUTHU0QXhWNutkUnFBTwIMRzI2ZTZhBqczSzS3MvQlVNd  
0p3VW1Jd1EyYmtFL0NsZFdsDCweExVVXNnQuI20VNGOTRCGpmW  
EZMODVJL2Vaa1NSem5RWHRsZnQVYzzJTG4yMDFyeIb3OGl0dEl1Z2R  
vNHBSanBLVzNuS095SlAwZ2Nrck0dWJCSG1HSjlqOW5YeXZraSszUU  
V4b5t30JRWfhOR28yaH2UFR3akhTSVUvdjhwbzKZhkpIVm8vTlZrtU  
9vK2tStkl5ZW1manpyYTFEnzdzyZDMrZjMveER4bGQraTg2K3dyRlkN  
WZlCDQzOElpK0pZMktLwnZxd1hxavZ5eGirTU1ENUjpNDNmTnBi50Js  
ZXJBZYU5pY2pRTGhUZVE1Vlk0d2pUczNMZVMxaytLRRhBZQVNROSTz  
ElsVWVaSjVNVDhtMnBodGtM0V4WHAYoJtZml2ZmxPRXRrdmdaZ  
m1OQzJPbUcyXNYZ3pWL05qZk5kakdZ2Zwp0vU0YKZ6WFdZKzNRQ  
3o4UGxpBuzZeWtJZlloebVMNzQ5MW9tVmZjeUlFuZBwB1hqt1Vnbl  
NsdxPMFBxRk5oODdyTwpvczJYYTg4THpmQmh1UFJIN2pwVxd1Y0  
pvbG1GU3ZlYUHd1NjNW1NWnl1ZUZvMuJlV3UxWlhuK1pzRzhEekdM  
R3lCc19XYkuNvo1NktuZzdYVbzBMDRGTlxNWE1VG95VVNDbi9ua1  
dYUkpe6UhRcGFwQUtmgVNPeKFDUEvtak9GYNzEQWNkbGMrWVpBK  
0U1bXVBYVmTnNpCvQWn3pzNkt0Qk9rbWRTNVJMXVvOENBd0VB  
QVE9PQotLS0tLUVORCBQVUJMSUMgS0VZLS0tLS0=, 'NN' => 'adam',  
)

Don't allow  
 yo6sgmfq7pfvpv2e4kcuhtfg7wfllt63igwcuuhbmum6lu3a3a.b32.i2p  
to prompt you again

OK

SEND

GET

DSC

cmd

123

Encrypted\_Message

Any\_other\_remarks

Misc

Activities Firefox Sel 11 Feb, 22:07 zh

yo6sgmfq7pfvp2e4kcuhtf X yo6sgmfq7pfvp2e4kcuhtf X + https://yo6sgmfq7pfvp2e4kcuhtf7wfllt63lgwcukhbmum6lu3a3a.b32.i2p/oxm/oxm.php?nn=adam 170% ☆

adam session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31  
session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

Omni\*Search Demo

Copy the following code and execute it in the browser console:

```
f(): B_F +' JSON.stringify({w:'like', t:'recipient_hash', f:'sender_hash'}) +' jd: rghc: g_
```

1602 Phos 1611 S 1621 B\_F start omni:  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => {'B\_AUTH':["SESSION:", "AUTH", "i:", "s:", 'lcdw:', 5 => 'B\_AUTH', ], 1 => array ( 'SP' => '9fa64665', 'PASS' => '20250210\_00:LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS0tLS0KTUIJQ0IqQU15C72txaGtnRzI3MF' 'NN' => 'adam', ), )  
fgl\_s 340 < 4 > array ( 0 => array ( 0 => {'B\_AUTH1': ["SESSION:", "AUTH", "i:", "PBK", "i:", "o\_hash.json", "l\_cdwjs", "t\_f0": "2025-02-10T00:38:00", "r": "Graph/dmeta/CXAGcRKevA==", } [ {"a\_cmd": ["s:", ";"], "t\_f0": "2025-02-10T00:38:00", "r": "Graph/dmeta/CXAGcRKevA==", "t": "2025-02-10T00:38:00"} ]  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => {'B\_AUTH':["SESSION:", "AUTH", "i:", "s:", 'lcdw:', 5 => 'B\_AUTH', ], 1 => NULL, )  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => {'B\_AUTH':["SESSION:", "AUTH", "i:", "s:", 'lcdw:', 5 => 'B\_AUTH', ], 1 => array ( 'SP' => 'e3235b7f', 'PASS' => '20250210\_0437341', 'PBK' =>

DSC

cmd

123

Encrypted\_Message

Any\_other\_remarks

Misc

adam

s: x:

AUTH GenKeys SEND GET

Open c\_pk.pem x d\_pk.pem x rsa.sh x libphos.js x e\_pk.pem x donald\_keypair.js x libphos.php x init.js x libfgl.php x libuui.php x alias.php x gui\_dsc.js x

```
gui_dsc.js
/var/www/dmeta/oxm/Phos
61 // 2023-02-05 GenKeys
62 S.push(document.createElement('button'));
63 S.push(document.createTextNode('GenKeys'));
64 n = S.length - 2;
65 d_form.append(S[n]);
66 S[n].append(S[n + 1]);
67 S[n].className = 'form-container btn';
68 S[n].onclick = function () {
69     alert('GenKeys');
70     S0 = M.S[0];
71
72     // 20230602
73     // After GenKeys button is clicked, check dialogue box for text – must have filename for pem
    file, and optional password, or Phoscript expression, else execute default generate keys.
74
75     // if S0.K is already loaded, just run AUTH_CSV: no need savekp:
76     if (typeof S0.K !== 'object') {
77         M.F(': save_auth savekp: ' + get_param.nn + ' AUTH_CSV: ; awt: rsa_oaep: save_auth ');
78         console.log('after rsa_oaep:', M.S);
79     } else {
80         M.S.push(S0.K.s_pk); // 20230616 need s_pk somehow!! for back end!!
81         M.S.push(S0.K.pair);
82         M.F(get_param.nn + ' AUTH_CSV:');
83     }
}
```

## Front End

PBK (Public Key)



## Back End

PBK (Public Key)

+

Secret Phrase (SP)

Ciphertext



Ciphertext

+

PVK (Private Key)



Secret Phrase (SP)

Secret Phrase (SP)

Root CA Certificate  
Contains the Root CA's Public Key

<https://support.mozilla.org/en-US/kb/secure-website-certificate>

/s/ Self-signed by Root CA's Private Key

Intermediate CA Certificate  
Contains the Intermediate CA's Public Key

/s/ Also signed by the Root CA's Private Key

TLS Server Certificate  
Server's Domain Name(s) and also its Public Key

/s/ Signed by the Intermediate CA's Private Key

Open

libphos.js  
/var/www/dmeta/oxm/Phos

```
460     $.F(arguments[0], 'je: xsend:');
461 }
462 function f_B() {
463     var bex = '3 4 + Graph rn: s:';
464     var F = M.F;
465     var S0 = window.M.S[0];
466     console.log('  in f_B S0.CDW', JSON.stringify(S0.CDW));
467     var $a;
468     var BEA;
469     // if (typeof M.S[0].dlb.PHOS !== 'undefined')
470     if (typeof window.S[0].dlb.PHOS !== 'undefined') // PHOS is pushed to window.S !!
471         $a = window.S[0].dlb.PHOS[1].value;
472     if (S0.CDW.length > 1) {
473         var n_a = S0.CDW[S0.CDW.length - 1][0];
474         $a = S[0].$CDW[n_a];
475     } else if (Object.keys(S[0].$CDW).indexOf($a) >= 0) {
476         console.log(Object.keys(S[0].$CDW).indexOf($a));
477         $a = S[0].$CDW[$a];
478     } else {
479         var s0 = preg_replace('/s+/', ' ', $a);
480         $a = explode(' ', trim(s0));
481     }
482     BEA = $a[$a.indexOf('B:') + 1];
483     var BEA_a = S[0].$CDW[BEA];
484 }
```

Open



libphos.js  
/var/www/dmeta/oxm/Phos

```
647 5      async function f_AUTH_CSV() {
648      var NN = S.pop();
649      var K = S.pop(); // key pair, K.privateKey decrypt secret phrase ciphertext after ajax
650      console.log(arguments);
651      var pbk = S[S.length - 1]; // s_pbk sent to server to encrypt secret phrase
652      console.log(pbk);
653      $.F('nxhr: auth/phos.php xo: xsrqh:');
654      var t = S.length - 1;
655      var ajax = S[t];
656      S[t].onreadystatechange = async function () {
657          if (ajax.readyState == 4 && ajax.status == 200) {
658              console.log.ajax.responseText);
659              var E1 = ajax.responseText;
660              var D1 = await window.crypto.subtle.decrypt({ name: 'RSA-OAEP' }, K.privateKey,
str2ab(atob(E1)));
661              console.log(ab2str(D1));
662              var a_csv = ': auth_csv dts: PASS ka: AUTH uss: ' + btoa(pbk) + ' PBK ka: AUTH
uss: ' + NN + ' NN ka: AUTH uss: ; ';
663              B(a_csv + ab2str(D1) + ' AUTH gsv: SP i: cmp: 0 ifeq: auth_csv b chromy ' + btoa
(pbk) + ' ON ECHO bv: ec: ec:');
664          }
665      };
666      $.F(btoa(pbk) + ' req_auth_sc', 'je: xsend:');
667  }
```

"req\_auth\_sc":["b64d:", "4", "orpb:", "hex:", "dup2:", "rsa:", "2", "pick:", "lkey:", "swap:", "r  
ecr:", "b64e:", "ON", "ECHO", "bv:", "ec:", "2", "pick:", "SP", "ka:", "AUTH", "uss:", ":"]

```
i:", "dts:", "over:", "over:", "jsp:", "rot:", "rot:", "swap:", " ", "jsd:", "=chat", "dc0:", " ", "jsd:", "rot:", "rot:", "jsp:", "jnl:", "swap:", "log", "\/", "jsd:", "wa:", ";"], "nick": ["NN", "ka:", "AUTH", "uss:", ";"], "req_auth_sc": ["b64d:", "4", "orpb:", "hex:", "dup2:", "rsa:", "2", "pick:", "lkey:", "swap:", "recr:", "b64e:", "ON", "ECHO", "bv:", "ec:", "2", "pick:", "SP", "ka:", "AUTH", "uss:", ";"], "b_cdw": [= _\Backup\o_cdw.json\/, "dw.json", "3", "mssx:", "o_cdw.json", "s:", "copy:", ";"], "s_ss": ["SESSION:", "s:", ";"], "uu_ls": [.\Graph\, "swap:", "2", "mssx:", "mkdir:", ";"], "a_cache": ["Web", "0", "i:", "\/", "explode:", "apop:", "cache", "apush:", "rgrep:", "\body\/", "ig:", "\div\/", "ig:", "\h", "window\/", "ig:", "av:", ";"], "a_keyword": ["UUID", "sw", "ref\/", "ia\.", "\src\/", "ia\.", "\width\/", "ia\.", "\", "global $S; $keystr = array_pop($S); $key = end($S); $key->loadKey($keystr);", "function fgl_lkey()", "function fgl_recr()", "function fgl_rsa()", "global $S; $str = array_pop($S); $key = end($S); $key->setHash('sha256'); $key->setMGFHash('sha256'); $S[] = $key->encrypt($str);", "553", "554", "555", "556", "557", "558", "559", "560", "561", "562", "563", "564", "565", "566", "567", "568"]
```

Open



libfgl.php  
/var/www/dmeta/o/auth

Save

```
1268 }  
1269 }  
1270 }  
1271 }  
1272  
1273 function FGL($a)  
1274 {  
1275     global $argv, $S, $SS, $xk, $xs, $SC, $SL, $CDW, $BV;  
1276     $a = preg_replace('/\s+/', ' ', $a);  
1277     $a = explode(' ', trim($a));  
1278     $SS[] = array(0, $a);  
1279     if (isset($D)) {  
1280         echo "\n\n" . __FUNCTION__ . " " . __LINE__ . " " . var_src($SS);  
1281     }  
1282     $xc = count($SS);  
1283     $xk =& $SS[$xc - 1][0];  
1284     $xs =& $SS[$xc - 1][1];  
1285     $xl = count($SS[$xc - 1][1]);  
1286     $vk = $xk;  
1287     $Z = $xl;  
1288     if (isset($D)) {  
1289         echo "\n" . __FUNCTION__ . " start " . __LINE__ . " vk " . $vk . " Z " . $Z . " SS " .  
var_src($SS) . "\n";  
1290         $S[] = $vk;  
1291     }
```

Open



Save

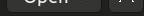


libfgl.php  
/var/www/dmeta/o/auth

```
var_src($$) . "\n";
    $S[] = $vk;
    $t = array_pop($S);
    $CC = $t[0];
}
do {
    // 20230609 Exception handling / errors etc.
    if (gettype(end($S))=="string") {
        if (substr(end($S),0,9)=="__ERROR__") { // exit; // break;
            echo "\n\n  FGL :post ".array_search(":post", $S[0])." ".var_src($BV)." ".var_src(
$SS)."\n";
            // exit; // break;
            // array_pop($SS);
            /*
            $xk=array_search(":post", $S[0])+1;

            $xc = count($$);
            // $xk =& $$[$xc - 1][0];
            $xs =& $$[$xc - 1][1];
            $xl = count($$[$xc - 1][1]);
            $vk = $xk;
            */
            echo "  ERROR xl ".$xl."  xk ".$xk."  xs ".var_src($xs)."  SS ".var_src($SS);
        }
    }
}
```

Open



c\_pk.pem x

d\_pk.pem x

rsa.sh x

libphos.js x

e\_pk.pem x

donald\_keypair.js x

libphos.php x

init.js x

libfgl.php x

libui.php x

alias.php x

gui\_dsc.js x

1360

```
        } } while (1),  
1361    } else {  
1362        if ($v[$l - 1] == ":") {  
1363            $l = strlen($v);  
1364            $fn = substr($v, 0, $l - 1);  
1365            if (function_exists("fgl_" . $fn)) {  
1366                if (isset($D)) {  
1367                    echo " xs: line " . __LINE__ . " fgl_" . $fn . " ";  
1368                }  
1369            }
```

1370

1371

```
1372 // if (gettype(end($S))=="string") if (substr(end($S),0,9)=="_ERROR_") { // exit;  
1373 /*  
1374     if (gettype(end($S))=="string") if (substr(end($S),0,6)=="==POST") { // exit;  
1375     echo "\n xs: " . __LINE__ . " ";  
1376     echo " v " . $v . " length " . strlen($v) . " ord " . ord($v) . " vk " . $vk . " ".  
1377     var_src($xs);  
1378     exit;  
1379 }
```

1380

```
call_user_func("fgl_" . $fn);
```

1381

1382

1383 //

```
if (gettype(end($S))=="string") if (substr(end($S),0,9)=="_ERROR_") { // exit;
```

[https://www.youtube.com/watch?v=\\_w-E4Z4Ju5s](https://www.youtube.com/watch?v=_w-E4Z4Ju5s)

DJSON Decentralised JSON × DJSON Decentralised JSON × yo6sgmfq7pfvp2e4kuhjtfg × yo6sgmfq7pfvp2e4kuhjtfg × yo6sgmfq7pfvp2e4kuhjtfg × +

underlying Bitcoin and other cryptocurrencies as well as novel decentralised social media platforms as we shall see in the following example:

- how to add a like function to **this** GitHub markdown article

We will reveal the answer first and explain later as we assume there are readers who are impatient:

- ["2025-02-11T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==", "HymWBzfj9A== s: x:"]

In the DJSON above, the fields are:

- timestamp, action, current\_user\_ID, prev\_msg\_owner, doc\_hash, messages

doc\_hash means hash of URL of document.

The following are the steps for generating the “like” DJSON of this article, accompanied by a video:

1. Save a copy of this web page as a local file.
2. Generate doc\_hash for this document.
3. Make a subdirectory for this document with doc\_hash.

## DJSON: Decentralised JSON -- ULTIMATE generalisation of Bitcoin address and blockchain, w/o MINING.



MI4 Metaprogramming in Forth

56 subscribers



Subscribed



前妻和兄弟好上司  
儿子喜欢上了邻家姐姐。 12:38

爆笑喜劇：前妻和兄弟好上，兒子喜歡鄰家大姐姐，自己還被...  
小古趣影

151K views · 1 year ago

DJSON Decentralised JSON is simply a JSON string containing one or more hashcodes, with at least one of them being the hash of public key of a user, thereby defining the decentralised legal persona of the user, and the ownership of the digital assets represented by other parts of the JSON string.

Omnihash is simply a hash code used to represent any type of digital assets, including user identifier, and a DJSON Decentralised JSON string can be converted to Omnihash using any hash function.

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)



## Conclusions (Part 1 & 2)

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

Crypto-Metaprogramming (CMP) is as easy as web programming as it does not require Blockchain to achieve both cryptographic and meta- programming functionalities.

CMP greatly simplifies Model-View-Controller architecture (and others), making each component essentially sending DJSON (Decentralised JSON) to other components, using standardised metaprogramming scripts (FORTH / Phoscript).

- *“JSON is the App.”*
- *Any app is a survey app.*

## Conclusions (Part 1 & 2)

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

By simplifying web and mobile app programming, it makes CLONING MMAGA (Microsoft, Meta, Amazon, Google, Apple) services achievable:

1. Open Source Tax: 0.1% of revenues (track usage of source code with Omnihash)
2. Collaboration amongst free software programmers and users using Omnihash (hash code for all digital assets).

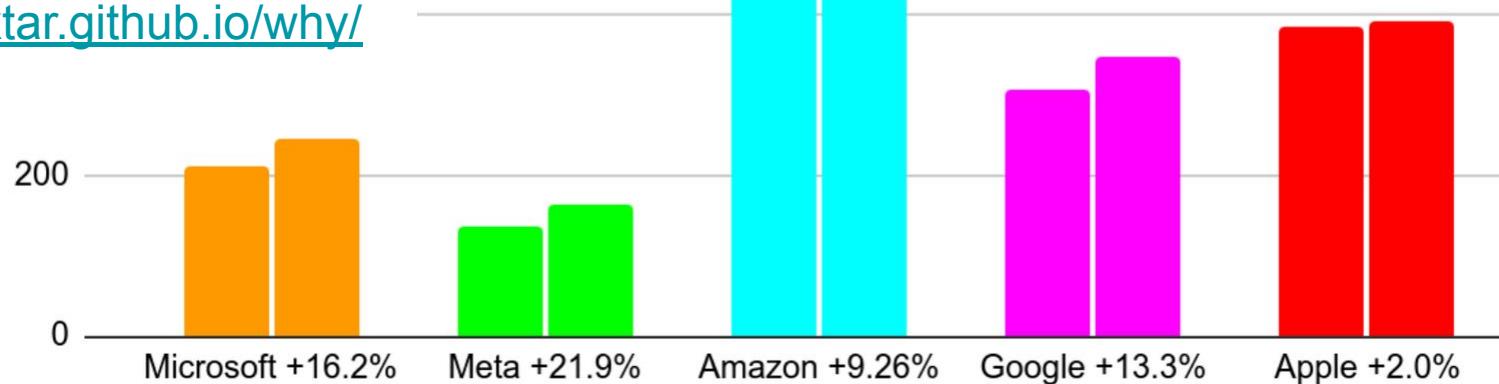
# MMAGA Revenues 2023/24 (USD billions)

Total 2024: USD 1.776 Trillion (+10.27%)



Why  
Crypto-  
Metaprogramming?

<https://omnixtar.github.io/why/>



• ISAAC ASIMOV  
FOUNDATION



Foundation

Omni\*Web

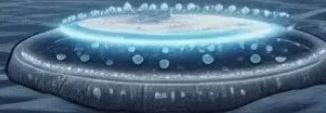


Psychohistory

CRYPTO METrogramming

METANARCHY

EMPIRE



	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

How to explain these concepts to all types of audiences?

Essence of Crypto-Metaprogramming:

In MVC, each of Model, View, Controller is part of a different environment, connected via network or pipe. Hence Front End and Back End need to provide secure protocols for communications amongst the components.

In Crypto-Metaprogramming, programmers take control of security protocols, simplifying each of Model, View, Controller component with (Phoscript) metaprogramming.

- We extend the infinity paradox of Hilbert Hotel to Hilbert Casino, where there are an infinite number of tables, of an infinite number of games, with infinite number of players, each having an infinite number of chips.
- Hilbert Casino can be easily extended to become Hilbert Bazaar, (in order to appeal to Islamic countries which ban gambling)
  - hosting all kinds of electronic transactions, where payments for goods and services replace betting and winnings.
- We assume that there are more people interested in participating in the development of an online casino than an electronic commerce platform, as the former is perceived to be giving bigger and faster returns, although both are equivalent from a technical perspective.
- Bonus Question for the Mathematically Inclined:
  - Relationships of Infinity with Alan Turing's Universal Turing Machine?





Omnihash GenKeys Save Help

Load Keypair

Browse... No file selected.

Your Hash is BWbhVr0DQQ==

Your Parent Hash is root

You have 0 downlines.

```
{"x":"REG","p":"root","h":"BWbhVr0DQQ==","t":1571451277730}
```

- You may copy & save this DJSON  
Decentralised JSON ...



Enter your first name:

Omnihash Memberships for  
SVFIG,  
or Any Commercial or  
Charity Bodies!!  
The Biggest Membership  
Multilevel Marketing  
Scheme by virtue of Hilbert  
Hotel – Infinity!!  
Enabled by I2P Invisible  
Internet Project

[https://www.youtube.com/watch?v=-3CO5bG\\_-q8](https://www.youtube.com/watch?v=-3CO5bG_-q8)

# INVISIBLE INTERNET PROJECT

The diagram illustrates the Invisible Internet Project. It shows two users, Alice and Bob, represented by computer icons. They are connected through a network of nodes labeled "I2P". The network is depicted as a cluster of green and yellow circles, representing the Internet. A large blue circle labeled "Omni\*Web" contains several "I2P" nodes. Alice's connection to the network is shown with a green arrow, while Bob's connection is shown with a blue arrow. The text "Bypass Domain Name System!!" is displayed in a box at the bottom left.

Internet

Alice

Bob

I2P

Omni\*Web

Bypass Domain Name System!!

0:56 / 1:54:48

https://omnixtar.github.io/oxw

Omni\*Web

Training Wind

Taichi-Metanarchy TRIMEDIA Tetrahedron

Digital Assets Water

Metaprogramming Fire

Infrastructure Earth

地

M

MI4 Metaprogramming in Forth

Subscribed

BOSS



	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

Omnihash: a hash code (53 bit base-64 string) representing any kind of digital assets, from user identifier to data and source code.

DJSON (Decentralised JSON): a JSON string (object) containing one or more Omnihash.

Abstraction of source code: Phoscript on PHP, JavaScript etc.

	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

We adapted Hilbert hotel paradox by using hash codes or hash numbers as hotel room numbers, to help ordinary users appreciate their applications.

E.g. Hotel Room Number = User Identifier

Anything inside a hotel room = digital asset (see DJSON + Omnihash)

	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

## Crypto-Metaprogramming:

Crypto: Omnihash + DJSON

Metaprogramming: Phoscript on ANY programming language host environment

	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

We extend the infinity paradox of Hilbert Hotel to Hilbert Casino, where there are an infinite number of tables, of an infinite number of games, with infinite number of players, each having an infinite number of chips.

Hilbert Casino = Any kind of digital transaction system = Hilbert Marketplace / Hilbert Bazaar (Gambling illegal in Islam)

• ISAAC ASIMOV  
FOUNDATION



Foundation

Omni\*Web



Psychohistory

CRYPTO METrogramming

METANARCHY

EMPIRE



Must highlight Omnihash Decentralised User Identifier, Decentralised Legal Persona, as fundamental concept of all. User ID first, then digital assets.

Decentralised Legal Persona, the most dangerous concept since Communist Manifesto? Revolution without violence. Why? Users protect their own digital assets, unless forcibly robbed of private key. Star Wars Order 66?

Ease (effort) to spread, literally one click, as shown in Omnihash button demo.

Reason why Metanarchy is achievable.

FORTH – unlike Psychohistory, not sure if Asimov know, other FORTHers may attest, simplify programming so EVERYONE CAN PROGRAM.

Any user, including non-programmer, may be able label a function with any string in any human natural language, and quote it for execution in Phoscript.

Any user capable of describing an action (in any human natural language) may recognise it when performed by another actor, then label it as per FORTH colon definition.

If user can define one CDW, he can do 2, 3, 4 .... Everyone can do metaprogramming. And make money from it.

Hilbert Hotel room guest card is the first step to understand and model the above.

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)

MY MAXIS 20:15 4G B/S WiFi 61%

≡ https://www.mojeek.com/ 🌐 ⋮

X Mojeek +

# mojeek



No Tracking. Just Search...



Looking for different results?



Value your right to privacy?



Trying to escape big tech?

Privacy Terms Settings

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≡ https://f-droid.org/packag... 🌐 ⋮

X monocles browser | F-D... +

# F-Droid

APPS FORUM DOCS NEWS ISSUES

CONTRIBUTE ABOUT



## monocles browser

A web browser that respects your privacy.

### New in version 1.9.2

- Expand the download provider options to be monocles browser, Android's download manager, and an external app.
- Remove wasted space between the navigation drawer icon and the URL bar.
- Add a scroll to bottom/top entry in the navigation menu.
- Add an option to display under camera cutouts in full-screen browsing mode.
- Fix a crash caused by a tab sometimes being created without a corresponding page

MY MAXIS 20:20 4G B/S WiFi 61%

≡ https://codeberg.org/mon... 🌐 ⋮

X monocles/monocles\_br... +



monocles / monocles\_browser

6 14 4

Code Issues 29 ...

Release of the monocles browser. A open source privacy respecting android browser. Based on the privacy browser by Soren Stoutner. <https://monocles.eu/more>

277 commits

2 branches

18 tags

746 MiB

main

Find a file

HTTPS <https://codeberg.org/monocles/> ...

Arne Fix up

7 months ago

.gradle

7 months ago

.idea

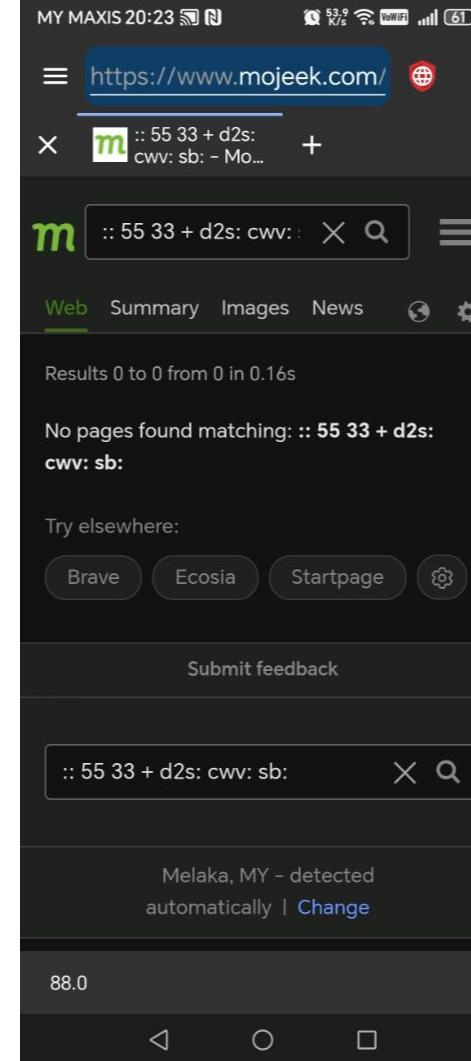
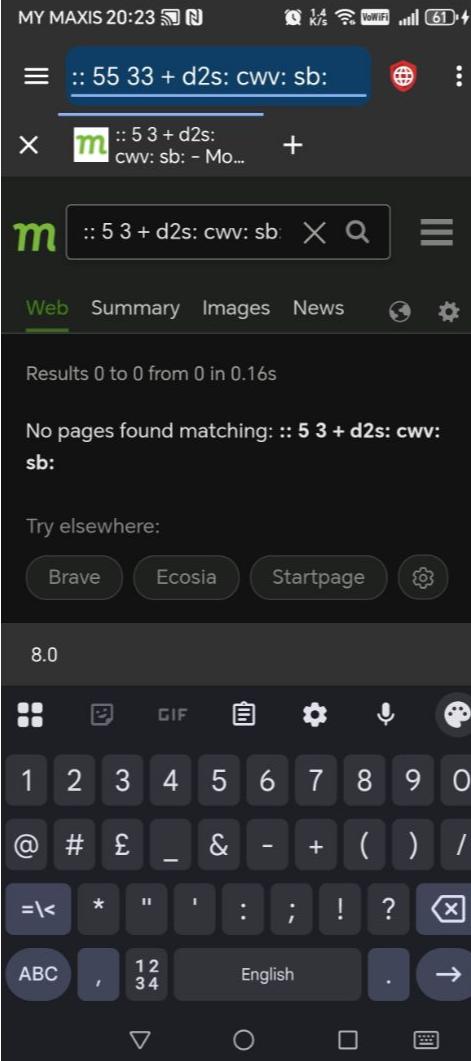
7 months ago

app

7 months ago

build/reports/configuratio...

last year



Activities Android Studio Rab 23 Jul, 2024 us zh

MB monocles\_brows... main HONOR ALI-NX1 app :

MainWebViewActivity.kt

```
class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi
private fun f_sb() {
    Snackbar.make(view = currentWebView!!, text = stack.pop(),
        duration = Snackbar.LENGTH_INDEFINITE).show()
}

private fun f_alert() {
    // Snackbar.make(currentWebView!!, stack.pop(), Snackbar
        LENGTH_INDEFINITE).show()
}
```

Logcat Logcat +

HONOR ALI-NX1 (A9CE6R4326004026) Android 15, API 28 package:mine is:info -line:Surface

2025-07-23 20:23:28.786 27585-27585	I unregisterDeviceIdChan
2025-07-23 20:23:28.786 27585-27585	I unregisterForContextMe
2025-07-23 20:23:28.786 27585-27585	I unregisterReceiver
2025-07-23 20:23:28.786 27585-27585	I unregisterScreenCaptur
2025-07-23 20:23:28.786 27585-27585	I updateServiceGroup
2025-07-23 20:23:28.786 27585-27585	I validateRequestPermiss
2025-07-23 20:23:28.787 27585-27585 search	I Result: 88.0
2025-07-23 20:23:28.787 27585-27585 phos	I in loadUrlFromTextBox
2025-07-23 20:23:28.787 27585-27585	I in loadUrlFromTextBox
2025-07-23 20:23:28.787 27585-27585 getCWV	I in getCWV() true
2025-07-23 20:23:28.787 27585-27585 phos	T in LoadUrlFromTextBox

er > app > src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > f\_alert 6050:28 LF UTF-8 4 spaces

Activities Android Studio Rab 23 Jul, 20:34 us zh

MB monocles\_brows... main HONOR ALI-NX1 app C : T A S E Q G 4 spaces

Android

app

- manifests
- kotlin+java
- java (generated)
- assets
- res
- res (generated)

Gradle Scripts

MainWebViewActivity.kt

```
> Q loadUrl x Cc W .* 27/37 ↑ ↓ ⌂ :
```

```
250 class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi 97 16 98 ^ v
6313     private fun loadUrlFromTextBox() { 1 Usage
6319         if (unformattedUrlString.substring(0,3)==":: ") {
6320             Log.i(tag = "search", msg = unformattedUrlString + " is phos")
6321             // val expression = "2 3 + 5 *".split(" ")
6322             val expression = unformattedUrlString.split(...delimiters = " ")
6323             // val result = evaluateRPN(expression)
6324             val result = evalPhos(tokens = expression)
6325             // println("Result: $result") // Output: Result: 25.
6326             Log.i(tag = "search", msg = "Result: $result") // Output: Result:
6327             25.0
6328
6329         try {
6330             Log.i(tag = "phos", msg = "in loadUrlFromTextBox "+(R.id
6331                 .root_frameLayout)::class.simpleName))
6332             Log.i(tag = "phos", msg = "in loadUrlFromTextBox
currentWebView!! "+((currentWebView!!)!=null))
6331             Log.i(tag = "phos", msg = "in loadUrlFromTextBox getCWV()
"+((getCWV())!=null))
6332         } catch (e: Exception) {
```

6324:46 (46 chars, 1 line break) LF UTF-8 4 spaces

Activities Android Studio Rab 23 Jul, 20:35 us zh

monocles\_brows... main HONOR ALI-NX1 app C : T A S E Q G :

Android app manifests kotlin+java java (generated) assets res res (generated) Gradle Scripts

MainWebViewActivity.kt

```
> Q evalPhos x Cc W .* 1/4 ↑ ↓ ⌂ :
```

250 class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi 97 16 98 ^ v

6143 val sd = Stack<Double>()

6144 val stack = Stack<String>()

6145 // default stack of string

6146 // convert to double or whatever type in function

6147

6148 private fun evalPhos(tokens: List<String>): String { 1 Usage 

6149 // val sd = Stack<Double>()

6150 // val stack = Stack<String>()

6151

6152 // val eng = ScriptEngineManager().getEngineByExtension("kts")!!

6153 // val result = engine.eval("2 + 3")

6154 // println(result) // Output: 5

6155

6156 for (token in tokens) {

6157 Log.i(tag = "RPN", msg = token)

6158 when (token) {

6159 "+", "-", "\*", "/" -> {

6160 if (stack.size < 2) {

6161 throw IllegalStateException(s = "Not enough operands")

> app > src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > MainWebViewA 6148:51 (57 chars, 1 line break) LF UTF-8 4 spaces

Activities Android Studio Rab 23 Jul, 22:54 us zh

MainWebViewActivity.kt

```
class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi { 97 16 ✓ 98 ^ v
    private fun evalPhos(tokens: List<String>): String { 1 Usage
        val ownerClassName = "de.monocles.browser
            .activities.MainWebViewActivity"
        val kClass = Class.forName(ownerClassName)
            .kotlin
        val myObject = kClass.newInstance()
        // val hasMethod = myObject::class.members.any
        { it.name == "f_test" }
        val hasMethod = myObject::class.members.any {
            it.name == "f_" + token.substring(0,token
                .length-1) }
        // val mPhos = myObject::class.members.single
        { it.name == "f_test" }
        val mPhos = myObject::class.members.single {
            it.name == "f_" + token.substring(0,token
                .length-1) }
        val obj = kClass.primaryConstructor?.call()
        if (b_cpf) {
```

Activities Android Studio Rab 23 Jul, 20:35 us zh

monocles\_brows... main HONOR ALI-NX1 app C : T A S E Q G :

Android

app

- manifests
- kotlin+java
- java (generated)
- assets
- res
- res (generated)

Gradle Scripts

MainWebViewActivity.kt

```
250 class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi 97 16 98 ^ v
6049
6050
6051
6052
6053
6054
6055
6056
6057
6058 private fun f_alert() {
6059     // Snackbar.make(currentWebView!!, stack.pop(), Snackbar.LENGTH_INDEFINITE).show()
6060     // loadUrl(currentWebView!!, urlString)
6061     // val urlString = "javascript:alert('WebView')"
6062     val urlString = "javascript:alert('"+ stack.pop() +"')"
6063     loadUrl( nestedScrollView = currentWebView!!, url = urlString)
6064 }
6065
6066
6067
6068 private fun f_cwv() { 1 Usage
6069     try {
6070         Log.i( tag = "phos", msg = "in f_cwv "+(R.id.root_frameLayout::class
6071             .simpleName))
6072
6073         val fields = MainWebViewActivity::class.declaredMemberProperties
6074         for (i in fields){
6075             Log.i( tag = "Fields ===", msg = i.name)
6076         }
6077         // val f = fields.single { it.name == "currentWebView" } // as
6078         NestedScrollView
6079     }
6080 }
```

ser > app > src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > MainWebView 6058:26 (26 chars, 1 line break) LF UTF-8 4 spaces

MY MAXIS 20:32

K/s WiFi 61%

:: 3 4 + d2s: alert:

X :: 3 4 + d2s:  
alert: - Mojee...

:: 3 4 + d2s: alert:

[Web](#) Summary Images News 

Results 1 to 10 from 1,403 in 0.22s

The following results matched your query but are likely to have limited relevance.



Using words that might appear on the page you're looking for could help. For example, 'cake recipe' instead of 'how to make a cake'.

<https://github.com/krisives/d2s-format>

Undo



q w e r t y u i o p

a s d f g h j k l

z x c v b n m



English



MY MAXIS 20:31

K/s WiFi 61%

:: 3 4 + d2s: alert:



X Loading...

# mojeek



The page at "https://www.mojeek.com" displays:

7.0



OK

[Privacy](#) [Terms](#) [Settings](#)

1 2 3 4 5 6 7 8 9 0

@ # £ \_ &amp; - + ( ) /

= \ &lt; \* " ' : ; ! ?

ABC , 1 2 3 4 English .



1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)

## Conclusions

1. Introduction
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

We begin with MMAGA (Microsoft, Meta, Amazon, Google, Apple) total revenues in 2024 nearly USD 1.8 trillion, and propose using Omnihash & DJSON Decentralised JSON to track usage of digital assets, and claim Open Source Tax, and improve collaboration amongst free software programmers and users.

Crypto-Metaprogramming greatly simplifies Model-View-Controller architecture (and others), making each component essentially sending DJSON (Decentralised JSON) to other components, using standardised metaprogramming scripts (FORTH / Phoscript).

- “JSON is the App.”
- Any app is a survey app.

## Conclusions

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

0.1% of MMAGA 2024 revenues is USD 1.8 billion.

- Can we achieve this by 2030?

If Free Software Programmers & Users achieve this, what else can Decentralised Legal Persona & Metanarchy achieve?

– Omnihash Bullion Coin (HBC)

We predict and propose to simulate our prediction using Omni\*Web itself, of a world made up of Three Kingdoms, namely, United States of America, China and Metanarchy Federation, comprising all other nation states.

## HBC: Omnihash Bullion Coins

1. HBC: Omnihash Bullion Coins (Physical Gold/Silver),
2. Trispecies Monetary System: Bullion, Fiat,  
Crytocurrencies
3. Liberalism vs. “Omnipotent Government” (OGism!!)



Agents must keep  
sufficient collateral  
of bullion in transit.

# Abstract

We begin with defining Crypto-Metaprogramming as “Bitcoin, simplified, minus Blockchain”. We then employ Hilbert Hotel room number to illustrate the significance of hash numbers and Hashcodes, and further employ Hilbert Casino and Hilbert Bazaar to illustrate decentralised digital assets, as well as using Hilbert Casino and Hilbert Bazaar as a generalised model for all computing applications. We then introduce the concept of Decentralised Legal Persona and Metanarchy, and argue that MMAGA (Microsoft, Meta, Amazon, Google, Apple) USD 1.8 trillion annual revenues should be imposed “open source tax”, and better free software can be produced by collaboration, using Omnihash and DJSON Decentralised JSON. We also predict and propose to simulate our prediction using Omni\*Web itself, of a world made up of Three Kingdoms, namely, United States of America, China and Metanarchy Federation, comprising all other nation states, from 2030 onwards.

1. SymFORTH Computer Algebra in FORTH / Phoscript
2. Grab loses drivers.
3. Hilbert other theorems, Yongle Encyclopedia, Asimov Foundation + Monty Python  
2D Fu Stack Machine



# symengine / symengine

Public



Notifications



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Issues 203



Pull requests 50



Actions



Projects



Wiki



Security



Insights

master

 Go to file[Code](#)**bjodah**

Merge pull request #2116 fro...



c574fa8 · 12 hours ago



6,420 Commits

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[benchmarks](#)

Support no RTTI with option HAVE...

4 months ago

[bin](#)

avoid requiring too strict boost vers...

last week

[binder](#)

MAINT: Pin doxygen

2 years ago

[cmake](#)

set cmake\_minimum\_required

3 months ago

[docs](#)

Merge pull request #1729 from Ha...

4 years ago

[symengine](#)

Make RCPNode tracing thread saf...

last week

## About

SymEngine is a fast symbolic manipulation library, written in C++

[symengine.org](#)

[c-plus-plus](#)[math](#)[computer-algebra](#)[Readme](#)[View license](#)[Activity](#)[Custom properties](#)[1.3k stars](#)[43 watching](#)[298 forks](#)



# udexon / SymForth (Public)

forked from [symengine/symengine](#)

[Notifications](#)

Fork 0



Star 13

[Code](#)[Pull requests](#)[Actions](#)[Projects](#)[Security](#)[Insights](#)[master](#) ▾[branch](#)[Go to file](#)[Code](#) ▾

This branch is 20 commits ahead of, 930 commits behind [symengine/symengine:master](#).

 udexon	Update SymForth.md	e012a98 · 5 years ago	 5,510 Commits
 SymForth	Update SymForth.md	5 years ago	
 benchmarks	Add files via upload	5 years ago	
 bin	Formatting	6 years ago	
 binder	Fix binder build env path	6 years ago	
 cmake	Remove -march-native in UserOv	6 years ago	

## About

SymForth is SymEngine with Forth wrapper, a.k.a. Phoscript -- a fast symbolic manipulation library, written in C++, now with Reverse Polish Notation support.

 [sympy.org](#)

 [Readme](#)

 [View license](#)

 [Activity](#)

 [13 stars](#)

 [1 watching](#)

Activities Terminal Sab 20:51 ● hongwu@hongwu-Dell-System-XPS-15Z: ~/devel/2020/symengine/symengine-master/Build/benchmarks

File Edit View Search Terminal Tabs Help

hongwu@hongwu-Dell-System-XPS-15Z: ~/Android/Sdk/ndk-bundle/toolchains/llv... x hongwu@hongwu-Dell-System-XPS-15Z: ~/devel/2020/symengine/symengine-mas... x hongwu@hongwu-Dell-System-XPS-15Z: ~/devel/2020/symengine/symengine-mast... x

0ms  
number of terms: 3  
Expanding r:  $2*x*y + x^2 + y^2$   
TOS 8

sm\_string: x sym: y sym: add: 2 3 + pow: 3 5 +  
sym: TOS x  
Expanding: x  
sym: TOS y  
Expanding: y  
In add: Expanding: x + y  
+: 5 3 2 5  
In pow:  
Expanding a: x + y  
Expanding:  $(x + y)^5$   
0ms  
number of terms: 6  
Expanding r:  $5*x^4*y^4 + 10*x^2*y^3 + 10*x^3*y^2 + 5*x^4*y + x^5 + y^5$   
+: 8 5 3 8  
ystack TOS: 8  
(base) hongwu@hongwu-Dell-System-XPS-15Z:~/devel/2020/symengine/symengine-master/Build/benchmarks\$ ./expandv x sym: y sym: add: 2 3 + pow: 3 5 +



Files

master



Go to file

&gt; SymForth

benchmarks

CMakeLists.txt

add1.cpp

bench.cpp

bench\_eval\_double.cpp

diff\_cache.cpp

eval\_double1.cpp

expand1.cpp

expand1.nb

expand2.cpp

expand2.m

expand2.mpl

expand2c\_mips32.cpp

## SymForth / benchmarks / expandv.cpp

Top

Code

Blame

506 lines (359 loc) · 18.9 KB

Raw



```
90
91
92         sm_proc("x sym: y sym: add: 2 pow: 3 5 +");
93
94         sm_string( command );
95
96
97         return 0;
98     }
99
100    int sm_string( std::string str0 )
101    {
102
103        std::stack<SymEngine::RCP<const Basic>> RCP_S;
104
105        // Use string stack for input and output?
106        // use separate RCP stack for internal processing?
107        // different type different stack, one stack for each type?
108
109        // printf("\nsm_proc: %s\n", str0);
110        std::cout << "\nsm_string: " << str0 << std::endl;
111
112
113        int clicked=1;
```



master



Q Go to file

&gt; SymForth

✓ benchmarks

CMakeLists.txt

add1.cpp

bench.cpp

bench\_eval\_double.cpp

diff\_cache.cpp

eval\_double1.cpp

expand1.cpp

expand1.nb

expand2.cpp

expand2.m

expand2.mpl

expand2\_nb.ipynb

Code

Blame

506 lines (359 loc) · 18.9 KB

Raw



```
100     int sm_string( std::string str0 )  
101  
102         if (str0 == "exp") { // SymEngine::expand1  
103             std::cout << "In exp: " << str0 << std::endl;  
104             RCP<const Basic> e, r, t, a;  
105  
106             int b = stoi(mystack.top()); mystack.pop();  
107             // std::cout << "Expanding b: " << b << std::endl;  
108  
109             RCP<const Basic> n = integer( b );  
110             std::cout << "Expanding b: " << b << std::endl;  
111             std::cout << "Expanding n: " << *n << std::endl;  
112  
113             a = RCP_S.top(); RCP_S.pop();  
114  
115             std::cout << "Expanding a: " << *a << std::endl;  
116  
117             e = pow(a , n);  
118  
119             std::cout << "Expanding: " << *e << std::endl;  
120             RCP_S.push( e );  
121         }
```

<https://vt.tiktok.com/ZSArhaHaY/>

Malaysia + Singapore population  
= 40 million = California

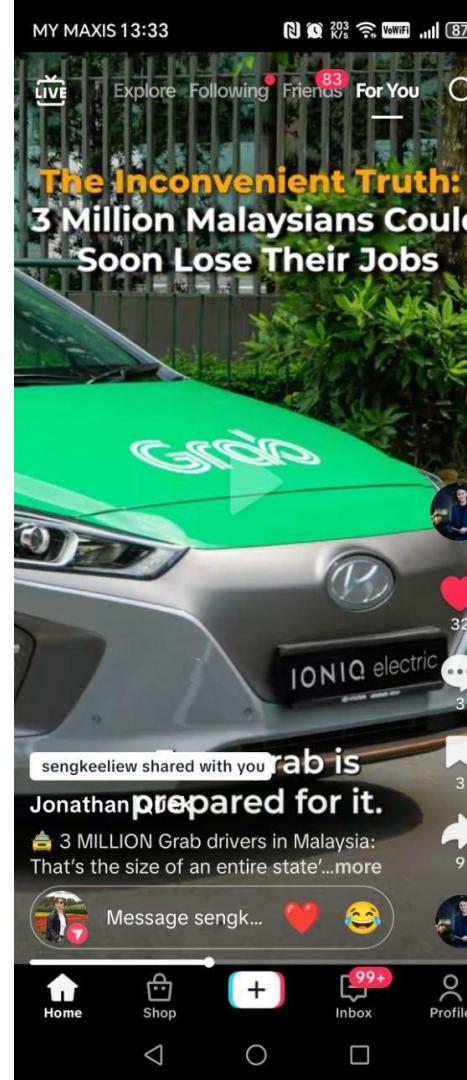
Land area

Malaysia + Singapore: 333,000 km<sup>2</sup>

California 424,000 km<sup>2</sup>

“Fengshui” South West of Asia

California = South West of USA



• ISAAC ASIMOV  
FOUNDATION



Foundation

Omni\*Web



Psychohistory

CRYPTO METrogramming

METANARCHY

EMPIRE



Asimov's Foundation and Monty Python disclaimer are two convenient excuses to deflect political correctness accusations on unpopular ideas.

Amongst politically incorrect theories gaining popularity recently in China include *Yongle Encyclopedia Conspiracy*, where Jesuit priests from Europe translated and plagiarised Yongle Encyclopedia, which is the source of all European scientific discoveries, from Copernicus Heliocentrism to Hilbert era mathematical theories.

Regardless of Yongle Encyclopedia Conspiracy, Konrad Zuse's Plankalkül and 2D stack machine notation, with Chinese Taoist Fu, or Talisman, sounds like a good plot for a fusion of Monty Python, Asimov Foundation and Harry Potter.

There could be some practical applications for 2D stack machines notations.

Asimov's Foundation animation of Psychohistory could be also 3D or 4D stack machine notation.

FORTH Chinese name was translated as 弗式, 弗 has no special meaning, 式 is formula, better translated as 符fu2 式shi4 , as in Taoist Fu Talisman.

Examples:

	$V$	
$V$	3	variable V3 — list of $m$ pairs of values of type
$K$		$S1 \cdot n$
$S$	$m \times 2 \times 1 \cdot n$	

	$V$	Row K could be skipped when it is empty.
$V$	3	Therefore, this expression means the same as
$S$	$m \times 2 \times 1 \cdot n$	above.

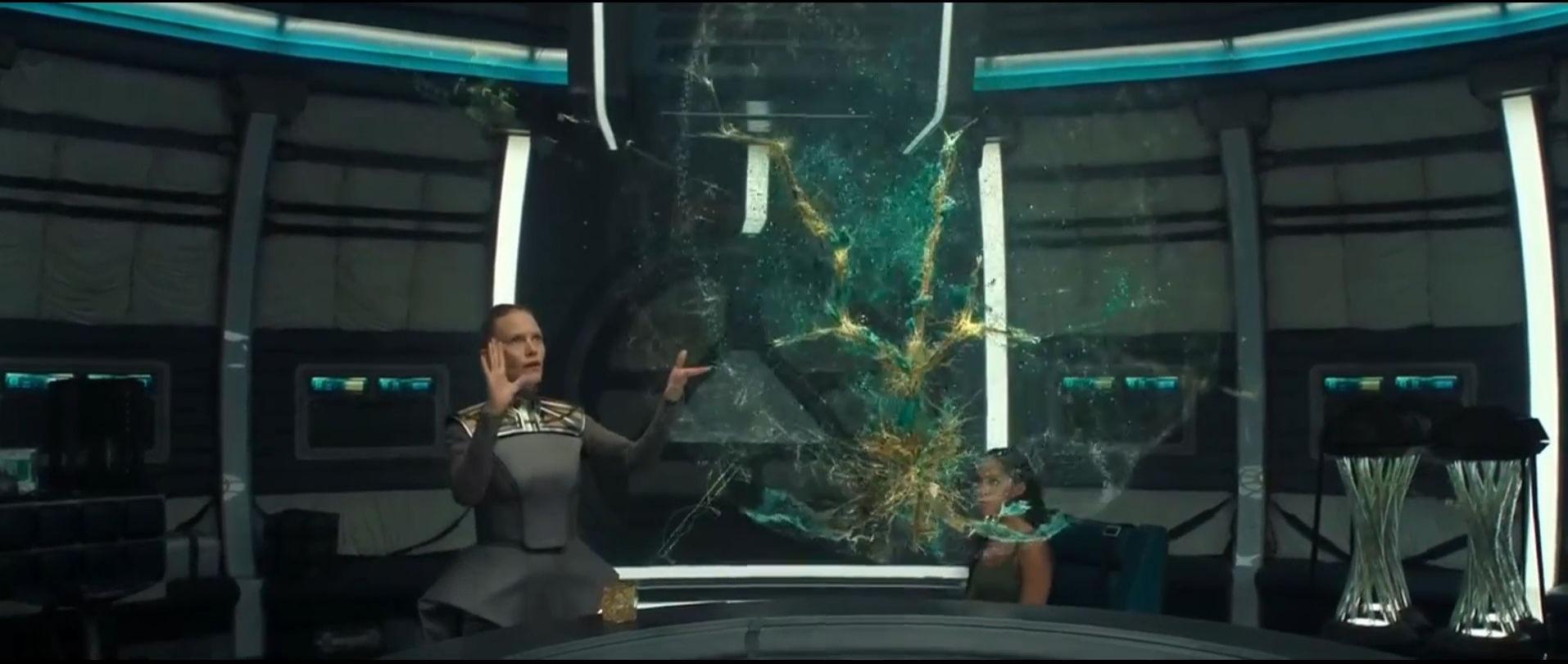
	$V$	Value of eight bit (index 7), of first (index 0) pair,
$V$	3	of i-th element of variable V3, has Boolean type (
$K$	$i \cdot 0 \cdot 7$	$S0$ ).
$S$	0	

Indexes could be not only constants. Variables could be used as indexes for other variables, and that is marked with a line, which shows in which component index would value of variable be used:

	$V$	$Z$	
$V$	3	5	Z5-th element of variable V3. Equivalent to
$K$			expression $V3[Z5]$ in many modern programming
$S$	$1 \cdot n$	$1 \cdot n$	languages. <a href="#">[16]:681</a>

招財進寶





Scene from Apple TV Foundation S3E6 19:00 (mm:ss)

Although Yongle Encyclopedia Conspiracy MAY not have a direct link to FORTH, German engineer Konrad Zuse's Plankalkül suggest the possibility of 2D stack machine notation, which is consistent with Chinese Taoist Fu, or Talisman.

One of the underlying hypothesis in Yongle Encyclopedia Conspiracy is that European mathematical equations such as " $x + 3 = 5$ " is translated from an unknown form from Yongle Encyclopedia, and Taoist Fu Talisman could be one possibility.

Open

libfgl.php  
/var/www/dmeta/o/auth

Save

```
332 {  
333     global $S;  
334     $S[] = array_keys(end($S));  
335 }  
336 function fgl_疊(){ fgl_s(); }  
337 function fgl_s()  
338 {  
339     global $S, $a, $BV;  
340     // 20250817 add SL length of stack string  
341     if (isset($BV['SL'])) { echo $BV['SL'];  
342     $l = strlen(var_export($S, true));  
343     echo "\n" . __FUNCTION__ . " " . __LINE__ . " < " . count($S) . " > " . preg_replace("/\\s+/", " ", substr(var_export($S, true), $l-$BV['SL'])) . "\n";  
344     }  
345     else echo "\n" . __FUNCTION__ . " " . __LINE__ . " < " . count($S) . " > " . preg_replace("/\\s+/", " ", var_export($S, true)) . "\n";  
346 }  
347 function fgl_si() // show stack starting from i  
348 {  
349     global $S, $a;  
350     echo "\n" . __FUNCTION__ . " " . __LINE__ . " < " . count($S) . " > " . preg_replace("/\\s+/", " ", var_export(array_slice($S, array_pop($S)), true)) . "\n";  
351 }  
352 function fgl_sa()  
353 }
```

Open



Save



```
137         } else {
138             echo $b;
139         }
140     }
141 }
142 }
143 function fgl_复()
144 {
145     fgl_dup();
146 }
147 function fgl_dup()
148 {
149     global $S;
150     $S[] = end($S);
151 }
152 function fgl_2dup()
153 {
154     fgl_over();
155     fgl_over();
156 }
157 function fgl_over()
158 {
159     global $S;
160     $l = count($S);
```

Activities Text Editor Jum 22 Ogos, 14:11 Save zh

Open alias.php /var/www/dmeta/o/auth

c\_pk.pem d\_pk.pem rsa.sh libphos.js e\_pk.pem donald\_keypair.js libphos.php init.js libfgl.php libui.php alias.php

```
449     }
450     fgl_s();
451     $xk = $i;
452     $S[] = array("prg_ctr", $i);
453 }
454 function fgl_读(){ fgl_fgc(); }
455 function fgl_fgc()
456 {
457     global $S;
458     $S[] = file_get_contents(array_pop($S));
459 }
460 function fgl_efgc() // echo file_get_contents; avoid web async read; direct output
461 {
462     global $S;
463     $S[] = file_get_contents(array_pop($S));
464     echo end($S);
465 }
466 function fgl_gt()
467 {
468     global $S;
469     $S[] = array_pop($S) < array_pop($S);
470 }
471 function fgl_dec()
472 {
```

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ php phos.php tmp/hello.txt 读: 复: 叠:  
PHP Warning: Undefined array key "AUTH" in /var/www/dmeta/o/auth/libphos.php on line 928  
PHP Warning: Trying to access array offset on value of type null in /var/www/dmeta/o/auth/0609_libf  
gl.php on line 312  
  
fgl_s 345 < 4 > array ( 0 => array ( 0 => 'phos.php', 1 => 'tmp/hello.txt', 2 => '读:', 3 => '复:',  
4 => '叠:', ), 1 => 'phos.php', 2 => '你好 Hello Ni Hao ', 3 => '你好 Hello Ni Hao ', )  
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ php phos.php tmp/hello.txt fgc: dup: s:  
PHP Warning: Undefined array key "AUTH" in /var/www/dmeta/o/auth/libphos.php on line 928  
PHP Warning: Trying to access array offset on value of type null in /var/www/dmeta/o/auth/0609_libf  
gl.php on line 312  
  
fgl_s 345 < 4 > array ( 0 => array ( 0 => 'phos.php', 1 => 'tmp/hello.txt', 2 => 'fgc:', 3 => 'dup:',  
, 4 => 's:', ), 1 => 'phos.php', 2 => '你好 Hello Ni Hao ', 3 => '你好 Hello Ni Hao ', )  
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ cat tmp/hello.txt ;echo  
你好 Hello Ni Hao  
  
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ 
```

## HBC: Omnihash Bullion Coins

1. HBC: Omnihash Bullion Coins (Physical Gold/Silver),
2. Trispecies Monetary System: Bullion, Fiat,  
Crytocurrencies
3. Liberalism vs. “Omnipotent Government” (OGism!!)



Agents must keep  
sufficient collateral  
of bullion in transit.