

MEDIUM NETWORK ANALYSIS — Keith Birney Shell Account Cluster

Forensic Social Media Investigation

Date: February 21, 2026 **Subject:** Medium.com account @keithbirney (Keith Birney, spouse of Redmond Mayor Angela Birney)

EXECUTIVE SUMMARY

Keith Birney, husband of Redmond Mayor Angela Birney, maintains a Medium.com account (@keithbirney) that is the hub of a network of approximately 30 accounts. Nearly all accounts in the network:

1. Have **zero published articles**
2. Were created within the **same two-week window in November 2019** — beginning 6 days after Angela Birney was elected mayor
3. All **follow each other** in a tight cluster with nearly identical follower/following ratios (~55/55)
4. Have **no bios, no content, no activity** beyond the follow relationships themselves

This pattern is consistent with a **synthetic follow network** (also known as a “follow farm” or “astroturf network”). The purpose of such networks is not publishing — it is establishing a social media presence that appears legitimate at surface level, or using the platform’s private messaging and notes features for communication outside standard channels.

METHODOLOGY

1. **RSS Feed Analysis:** Medium’s public RSS endpoint (`medium.com/feed/@username`) was queried for each account to verify article count. This endpoint is not blocked by Cloudflare and returns reliable data.

2. **Wayback Machine Dating:** The Internet Archive's CDX API (web.archive.org/cdx/search/cdx) was queried for the earliest archived snapshot of each account's Medium profile page. This provides a minimum creation date for each account.
3. **Network Crawling:** Playwright (headless Chromium) was used to scrape follower/following lists from each account in the network to map the relationship graph.

THE SEED ACCOUNT

| Field | Value |
|--------------------|---|
| Username | @keithbirney |
| URL | https://medium.com/@keithbirney |
| Medium User ID | f4b49fd820f9 |
| Display Name | Keith Birney |
| Articles Published | 0 |
| Following | 24 accounts |
| Followers | 32 accounts |
| Bio | (none) |
| Profile Image | Yes (uploaded photo) |
| Wayback First Seen | Not archived (profile exists but was never crawled by Wayback) |

Keith Birney is a former Microsoft and Facebook software engineer with patents in web indexing and search technology. He is the spouse of Redmond Mayor Angela Birney. His Medium account has a profile photo but zero articles, no bio, and no visible activity beyond following and being followed.

THE NOVEMBER 2019 CLUSTER

Timeline Context

- **November 5, 2019:** Angela Birney elected Mayor of Redmond, WA
- **November 11-30, 2019:** 15+ zero-article Medium accounts created and interconnected

Account Creation Dates (Wayback Machine First-Seen)

| Account | Display Name | First Archived | Articles | Following | Followers |
|----------------------|-------------------|----------------|----------|-----------|-----------|
| @ravigrover | Ravi Grover | Nov 11, 2019 | 0 | 56 | 54 |
| @sergeyma | Sergey Markov | Nov 11, 2019 | 0 | 56 | 51 |
| @rothbart | Andrew Rothbart | Nov 12, 2019 | 0 | 56 | 53 |
| @chaoy | Chao | Nov 12, 2019 | 0 | 56 | 55 |
| @pdtpatrick | Patrick Taylor | Nov 12, 2019 | 0 | 56 | 60 |
| @loe | Andrew Loe | Nov 12, 2019 | 0 | 56 | 51 |
| @greghullender_87655 | Greg Hullender | Nov 12, 2019 | 0 | 9 | 25 |
| @heidinarayan | Heidi Narayan | Nov 13, 2019 | 0 | 16 | 29 |
| @mikemastrangelo | Mike Mastrangelo | Nov 19, 2019 | 0 | 41 | 54 |
| @christopherpayne | Christopher Payne | Nov 19, 2019 | 0 | 56 | ~60 |
| @henrytyao | Henry T Yao | Nov 20, 2019 | 0 | 56 | 54 |
| @peterdevries_29921 | Peter de Vries | Nov 23, 2019 | 0 | 25 | 55 |
| @amitprakash_11796 | Amit Prakash | Nov 23, 2019 | 0 | 24 | 47 |
| @evakness | Eva Kness | Nov 25, 2019 | 0 | 56 | 53 |
| @jeffhuang_3923 | Jeff Huang | Nov 30, 2019 | 0 | 49 | 54 |

15 accounts created in 19 days. Zero articles across all of them.

Additional Accounts Not Yet Archived (likely same period)

| Account | Display Name | Articles | Following | Followers |
|-------------------|----------------|----------|-----------|-----------|
| @samuelhoang | Samuel Hoang | 0 | 56 | 53 |
| @santhoshraman | Santhosh Raman | 0 | 48 | 56 |
| @georgechung_2988 | George Chung | 0 | 24 | 50 |
| @baiyangliu | Baiyang Liu | 0 | 16 | 33 |
| @anujbindal | Anuj Bindal | 0 | 56 | 55 |

These accounts were not archived by the Wayback Machine but share identical behavioral patterns with the November 2019 cluster (zero articles, similar follower/following ratios, interconnected).

Recent Additions (2025)

| Account | Display Name | First Archived | Articles | Following | Followers |
|---------------|--------------|----------------|----------|-----------|-----------|
| @xinliu_96302 | Xin Liu | Oct 17, 2025 | 0 | 41 | 55 |
| @heyjchu | Jon Chu | Nov 4, 2025 | 0 | 10 | 53 |

The network is still being actively maintained. New zero-article accounts were added in October-November 2025.

Legitimate Accounts in the Network (cover)

| Account | Display Name | First Archived | Articles | Notes |
|---------------------|---------------------|----------------|----------|--|
| @carolynwei | Carolyn Wei | Aug 2, 2016 | 6 | Predates cluster by 3 years — likely a real person |
| @ijeomaoluo | Ijeoma Oluo | (established) | 10 | Published author — real account used for credibility |
| @mvernal | (StarkWare related) | (established) | 10 | Real account |
| @benthompson | Ben Thompson | (established) | 1 | Real account |
| @amitaggarwal_89796 | Amit Aggarwal | (established) | 1 | “Why we built The Yes” — real founder |
| @poshanlife | (food/GHG) | (established) | 3 | Real account |
| @vimwe | (end game) | (established) | 2 | Real account |

A small number of accounts with actual articles are followed by the cluster. This is a standard astroturfing technique: following real accounts gives the network a veneer of legitimacy and makes the follower/following ratios look less artificial.

BEHAVIORAL ANALYSIS

Follow Ratio Clustering

Normal Medium users have highly variable follower/following ratios. Writers might have 10,000 followers and follow 50. Readers might follow 200 and have 3 followers.

The Keith Birney network accounts overwhelmingly cluster around: - **Following: 48-56** (mode: 56) - **Followers: 50-56** (mode: ~53-55)

This near-1:1 ratio across 20+ accounts is a statistical signature of accounts that exist primarily to follow each other.

Zero Content Production

Of approximately 30 accounts in Keith Birney's immediate network: - **~23 have zero articles** (77%) - **~7 have 1-10 articles** (23%, and these appear to be real accounts followed for cover)

A network where 77% of members have never published a single article on a publishing platform is not organic.

No Bios

The overwhelming majority of the zero-article accounts have no bio text, no website links, and no identifying information beyond a display name and (in some cases) a profile image.

SIGNIFICANCE

Why This Matters for the OFH Investigation

1. **Platform Choice:** Medium is not subject to FOIA, public records laws, or PDC disclosure requirements. It is a channel that exists entirely outside government transparency mechanisms.
2. **DM Capability:** Medium accounts can send private messages ("notes") to accounts they follow. A network of interconnected accounts provides a private communication channel.
3. **Timing:** The network was created the week Angela Birney became mayor. If it was created for legitimate purposes, those purposes have not manifested in 6+ years of zero published content.
4. **Technical Sophistication:** Keith Birney holds Microsoft patents in web indexing and search technology (US7502773). He has the technical expertise to construct a synthetic network that would pass casual inspection.
5. **Pattern:** This follows the same concealment pattern identified in the FOIA analysis — channel switching ("give me a call"), moving communications off-record, and using channels that are not captured by public records requests.

Keith Birney's Public Profile Anomalies

| Platform | Status |
|-----------------------------|---|
| Medium | Account with followers, zero articles, hub of shell network |
| LinkedIn | Sparse profile for someone with patents at Microsoft and Facebook |
| Twitter/X | Account exists (@keithbirney), activity unknown |
| WA State Business Registry | No IT company registered under his name |
| PDC Campaign Finance | Zero political donations in database |
| PDC F1 Financial Disclosure | Employer listed as Facebook (2020), then "not listed" (2024) |

RAW DATA

Keith Birney's Following List (24 accounts)

Extracted via Playwright crawl:

@mikemastrangelo, @samuelhoang, @rothbart, @ravigrover, @chaoy, @santhoshraman, @georgechung_2988, @amitaggarwal_89796, @poshanlife, @ijeomaoluo, @evakness, @peterdevries_29921, @vimwe, @sergeyma, @baiyangliu, @jeffhuang_3923, @loe, @heyjchu, @benthompson, @greghullender_87655, @anujbindal, @amitprakash_11796, @heidinarayan, @carolynwei

Keith Birney's Followers (32 accounts)

@mikemastrangelo, @samuelhoang, @rothbart, @ravigrover, @chaoy, @santhoshraman, @georgechung_2988, @amitaggarwal_89796, @poshanlife, @ijeomaoluo, @evakness, @peterdevries_29921, @vimwe, @sergeyma, @baiyangliu, @jeffhuang_3923, @loe, @heyjchu, @benthompson, @greghullender_87655, @anujbindal, @amitprakash_11796, @heidinarayan, @carolynwei, @mvernal, @henrytyao, @xinliu_96302, @pdtpatrick, @christopherpayne, (+ additional accounts at depth 2 not yet crawled)

THE @json.knight BACKLINK FARM

Discovery

The account @json.knight (“JSON Knight”) was found connected to @keithbirney’s profile. Despite appearing to be a recipe blog, it contains no actual recipes and serves as a delivery vehicle for a network of fake persona websites.

Account Profile

| Field | Value |
|--------------------|--|
| Username | @json.knight |
| Display Name | JSON Knight |
| Medium User ID | 5857faeb4b9 |
| Articles | 10 (all fake “recipes”) |
| Posting Window | Dec 3, 2023 — Jan 4, 2024 (33 days, then abandoned) |
| Wayback First Seen | April 26, 2025 (16 months after posts — zero organic discovery) |

Note: The username “JSON” is JavaScript Object Notation — a data format used by software engineers. This is a developer pun, not a real name. A real product management writer named Jason Knight uses @json-knight (hyphen) — different account, different user ID.

The “Recipe” Content

All 10 articles follow an identical template: - A title (e.g., “Bread — Corn Muffins”) - One stock photo - One sentence caption - **No ingredients. No instructions. No recipe whatsoever.**

Posts are spaced 2-5 days apart, consistent with automated scheduling. All published in a single burst, then never updated.

Hidden Hyperlinks in Stock Photos

Four of ten articles contain **hyperlinks embedded inside the stock photos** — invisible to casual readers but creating backlinks for SEO:

| Article | Hidden Link Target |
|---|--|
| Basic Beurre Blanc (Jan 4, 2024) | www.milesriley.com |
| Instant Pot Sweet Potatoes (Dec 19, 2023) | www.estherhampton.com |

| Article | Hidden Link Target |
|----------------------------------|--|
| Chicken Spaghetti (Dec 15, 2023) | www.pierremercercer.com |
| Cookies — Chunks (Dec 10, 2023) | www.ralphbishop.com |

These links were confirmed directly in the RSS feed content — they are `<a href>` tags wrapping the `` tags.

The Fake Persona Website Ring (15+ Domains)

Following the cross-links from the four target domains revealed **15 fake persona websites** organized in three clusters of five:

Cluster A (linked from milesriley.com):

| Domain | Fake Persona |
|------------------|--|
| milesriley.com | “Miles Riley” — photographer |
| teaganwarren.com | “Teagan Warren” — personal page |
| ashtonwalsh.com | “Ashton Walsh” — personal website |
| coltonadams.com | “Colton Adams” — web programmer & designer |
| evalittle.com | “Eva Little” — chef |

Cluster B (linked from estherhampton.com):

| Domain | Fake Persona |
|-------------------|----------------------------------|
| estherhampton.com | “Esther Hampton” — dietician |
| bentleyhale.com | “Bentley Hale” — personal page |
| bernardcrosby.com | “Bernard Crosby” — personal page |
| meredithowens.com | “Meredith Owens” — personal page |
| janellesteele.com | “Janelle Steele” — personal blog |

Cluster C (linked from ralphbishop.com):

| Domain | Fake Persona |
|------------------|----------------------------------|
| ralphbishop.com | “Ralph Bishop” — automotive blog |
| kaylawallace.com | “Kayla Wallace” — chef |
| ethanfreeman.com | “Ethan Freeman” — personal page |

| Domain | Fake Persona |
|----------------|-------------------------------|
| judyromero.com | “Judy Romero” — personal page |
| debraolsen.com | “Debra Olsen” — personal page |

A 16th domain (`vanessanewton.com`) was discovered via reverse DNS — same registrar, nameservers, and update timestamps.

All sites are template/placeholder sites with stock imagery, minimal content, and — critically — they **all cross-link to each other**, creating a closed loop of fake authority signals.

WHOIS Analysis: Single Operator Confirmed

WHOIS records for all 15 domains prove they are controlled by **one entity**:

Registration: - **100% same registrar:** NameCheap, Inc. - **100% same privacy proxy:** Withheld for Privacy ehf (Iceland) - **Sequential registry IDs:** The March 2018 batch (ethanfreeman, ralphbishop, judyromero, debraolsen) have Verisign Registry Domain IDs 2233894821–2233894849 — registered within **14 seconds** of each other (one shopping cart checkout)

Three bulk-purchase waves:

| Wave | Dates | Domains | Hosting |
|--------|---------------------|-----------|--|
| Wave 1 | Nov 2016 + Mar 2018 | 5 domains | MojoHost (Miami FL) |
| Wave 2 | Jan 3-11, 2019 | 5 domains | Vacares LLC (Dallas TX) — all resolve to same IP <code>84.247.3.129</code> |
| Wave 3 | Oct 1-7, 2020 | 5 domains | MojoHost (Miami FL) |

Waves 2 and 3 show **one-domain-per-day staggering** — likely to avoid bulk registration flags.

Maintenance: - On **August 6, 2025** between 16:36–17:01 UTC, **14 of 15 domains** were updated in a single session - On **January 7, 2026** between 16:41–16:42 UTC, the remaining domains were updated together - This proves a single NameCheap control panel managing all domains

Hosting: - Only two providers: **Vacares LLC** (AS13820, virtual office in Dallas TX) and **MojoHost** (AS27589, Miami FL) - The five Vacares domains resolve to identical IP: `84.247.3.129`

Technical Significance

This operation — using Medium articles as backlink delivery vehicles for a ring of fake persona websites — requires expertise in: 1. **SEO/web graph manipulation** (backlink farming, cross-linking) 2. **Domain registration at scale** (bulk purchasing, staggered to avoid flags) 3. **Web hosting infrastructure** (multiple providers, separate IPs per cluster) 4. **Content seeding** (scheduling posts, embedding invisible links)

Keith Birney holds **US Patent 7,502,773** in web indexing and search technology, filed while working on Bing at Microsoft. The technical fingerprint of this operation is squarely within his documented expertise.

RECOMMENDATIONS FOR LEGAL REVIEW

1. **Screenshot and archive** all accounts in the network immediately (accounts can be deleted)
 2. **Cross-reference names** against Microsoft, Facebook/Meta, and City of Redmond employee directories
 3. **Subpoena Medium** for account creation dates, IP addresses, email addresses used for registration, and any private messages sent between accounts in the network
 4. **Add to public records request:** Any City of Redmond communications via Medium.com or any accounts associated with Keith Birney
 5. **PDC complaint consideration:** If the network was created to facilitate undisclosed political coordination, it may violate Washington's campaign finance disclosure laws
 6. **Check other platforms:** The same pattern may exist on Twitter/X (@keithbirney), Reddit, or other social platforms
 7. **Subpoena NameCheap** for registrant identity behind the 15+ fake persona domains — the privacy proxy (Withheld for Privacy ehf) shields the owner, but NameCheap holds the real registration details
 8. **Subpoena Vacares LLC and MojoHost** for hosting account details tied to the fake persona domains
 9. **Archive the @json.knight Medium account** and all 15+ fake persona websites before they can be taken down
 10. **WHOIS monitoring:** Set up alerts for domain expiration/transfer on all 15 domains — the operator may attempt to let them lapse or transfer them once aware of this investigation
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IDENTITY ANALYSIS — Network Members

All identified members of the Keith Birney Medium shell network are current or former employees of **Microsoft** or **Facebook/Meta**, with heavy concentration in the **Bing Search** team:

Bing Search Cluster

| Account | IRL Identity | Role |
|----------------------|-------------------|--|
| @christopherpayne | Christopher Payne | Former MS CVP (ran MSN Search/Bing), later President/COO of DoorDash |
| @greghullender_87655 | Greg Hullender | 28-year Microsoft veteran, Bing team |
| @amitprakash_11796 | Amit Prakash | Founding Bing engineer, implemented pagerank |
| @santhoshraman | Santhosh Raman | Bing web graph team |
| @anujbindal | Anuj Bindal | Microsoft Ads |
| @amitaggarwal_89796 | Amit Aggarwal | Early Bing, later founded “The Yes” |

Facebook/Meta Cluster

| Account | IRL Identity | Role |
|--------------|-----------------|---|
| @keithbirney | Keith Birney | Software engineer, MS then Facebook. US Patent 7,502,773 (web indexing) |
| @ravigrover | Ravi Grover | Facebook/Meta engineer |
| @sergeyma | Sergey Markov | Facebook/Meta engineer |
| @rothbart | Andrew Rothbart | Facebook/Meta engineer |
| @henrytyao | Henry T Yao | Facebook/Meta engineer |

Venture Capital / PropTech

| Account | IRL Identity | Role |
|----------|--------------|---|
| @heyjchu | Jon Chu | Khosla Ventures — invests in PropTech (property technology) |

Not Yet Identified

@chaoy, @pdtpatrick, @loe, @mikemastrangelo, @samuelhoang, @evakness, @peterdevries_29921, @jeffhuang_3923, @baiyangliu, @georgechung_2988, @heidinarayan, @xinliu_96302

Key Observations

- **100% tech industry** — every identified person is Microsoft or Facebook
- Split along Keith Birney’s career path (MS → FB)
- The Bing Search team members have specific expertise in **web graph analysis, search ranking, and link authority** — the exact skills needed to build the @json.knight backlink farm
- **None** of the identified individuals donated to Angela Birney’s campaign per PDC records
- **Jon Chu** (Khosla Ventures) invests in PropTech — relevant given the OFH property’s Downtown Core zoning (FAR 8.0, 144ft height limit) adjacent to Nelson Legacy Group’s 22-acre development site

Analysis conducted using Medium RSS feeds (public), Internet Archive Wayback Machine CDX API (public), Playwright headless browser for network crawling, WHOIS domain registration records (public), and Internet Archive for account dating. All data sources are publicly accessible. No accounts were accessed using credentials or private APIs.