Programming Socks: Is it high time for thigh-highs? An investigation into the perceived unreasonable effectiveness of Programming Socks on productivity levels in the field of Software Engineering

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Abstract

Programming Socks are an essential piece of equipment for any respectable software engineer. However, there is limited research on the level of impact that they have on practitioners. In this paper we investigate the claim that Programming Socks are a low-cost high-impact upgrade to engineers' wardrobes and find that they have much untapped potential.

1 Introduction

Programming Socks are thigh length or "Thigh-High" socks, commonly striped but not as a critical necessity (See Figure 1 for an example). They have been long-hailed as essential items to improve programmer performance, code quality as well as job satisfaction.

Other related items that are known to be useful for programming include: cat tails, cat ears, mittens and mini-skirts.¹ Surprisingly, garments traditionally designed for the duties of a French housemaid are purportedly equally effective — if not more so — in the realm of software development. According to informal polls with select focus groups², public opinion suggests that the attire helps to promote 'clean code' practises.

Other innovations of note include replacing the long-beloved practise of talking to rubber ducks to assist in debugging issues[3]. A cuddlier substitute has been found in the popular Swedish furniture store IKEA. The plush shark "Blåhaj" appears to be more appealing to both new and old developers alike. The new practise of verbal debugging with these shark toys has been coined as "Blah-Blah-Blåhaj" 3, but the term has yet to catch on.



Figure 1: An example Amazon listing [1]. 900+ bought in the last month⁴. 4.4/5 average star rating

¹It is often misunderstood that the widespread disappointment over the open-souce event 'Hacktoberfest' was about the removal of the complimentary participatory shirts, but the refusal to provide skirts, which would have been an investment into open-souce quality for years to come.

²i.e. My friends

³by me, just now

 $^{^4}$ December 2023

2 Data Gathering & Analysis

A set of images were gathered of individuals posting online about their socks of choice in front of their computer screen. Key attributes were gleamed from the data, using widely-available organic ocular systems. 5 6



Figure 2: Samples from the dataset.

A significant source of "feet pics" was on the social news aggregation site Reddit.com. While some communities on Reddit are dedicated to the promotion of the practise (e.g. r/unixsocks/ [4]) there are several examples of Programmer Socks under discussion in other areas of the website (e.g. r/brisbane [5] of Australia)

3 Results and Analysis

3.1 Effects on Programming

The principal metric we wished to observe was whether programmers who wore Programming Socks were truly as productive as expected. Figure 3 shows a breakdown of technical content on wearers' screens. There was a surprising lack of interactive development environments, text editors or other signs of code production. However, the overwhelming majority of wearers had terminals visible, often with prominent ASCII art logos in transgender or non-binary colour schemes⁷.

From this data, we can only conclude that either: Programming Socks have become more main-stream and non-programmers wearing these socks are developing into programmers themselves — or that Programming Socks are so effective that the majority of wearers in our dataset simply finished their software and did not need to do any additional coding. Either way, this result is a clear endorsement of their usage. Further research is desirable to investigate these effects when paired with the additional attire mentioned in Section 1

⁵Note that it is unclear if the effects of Programming Socks extend to data collection, which may have effected the quality of the dataset.

⁶This is the reason I had all these pictures of feet on my computer, I swear.

⁷Actually all of the terminal logos in the dataset were non-binary. I suppose that's because it's hard to draw things with only ones and zeroes without having a very zoomed out screen

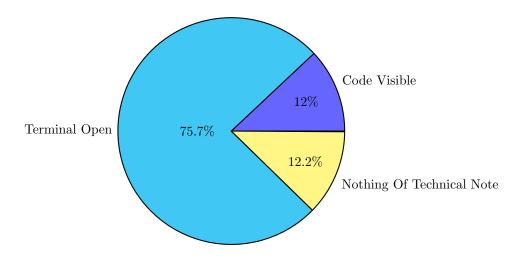


Figure 3: Evidence of coding on-screen

3.2 Colour Preference

A wide variety of Programming Socks are available. However, there are some general trends in the space. Striped socks are significantly more popular than non-striped socks (As shown in Figure 4) and there is a clear preference for some basic colours 5 - black, white, pink.

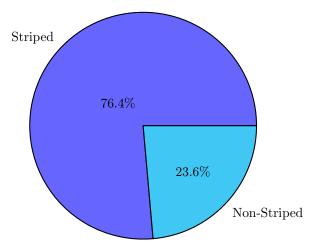


Figure 4: Popularity of Stripes

It was surprising to discover that rainbow socks were not chosen as often as other colour combinations, because it is obviously the best choice.

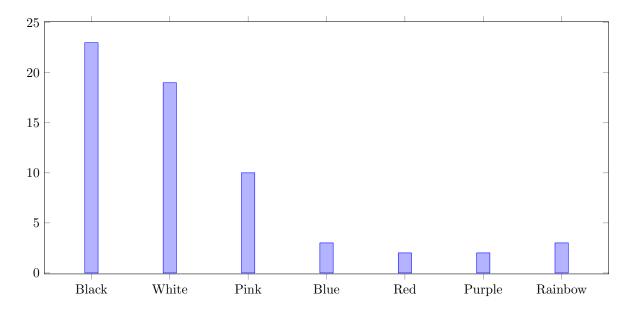


Figure 5: Colour Preferences

4 Appendix

We include other findings of interest below.

4.1 Amazon Search Listings

When searching for Programming Socks on Amazon.com, the majority of listings are correctly indexed as thigh-high socks. There are a limited amount of novelty socks with a programming theme ⁸ and an equal amount of novelty socks that were unrelated to programming⁹. There were also a few shoes and gloves.

We decided to not divide Programming Socks into sub-categories, such as ones that had paw pads on their toes, fluff and glitter or small teddy bear faces at their peak.

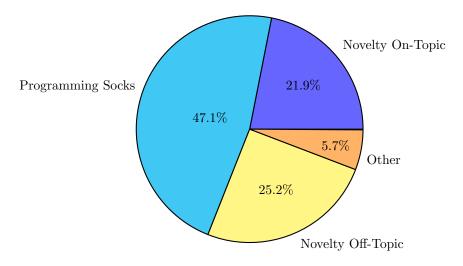


Figure 6: Amazon Listings for Programming Socks

 $^{^8}$ "I will NOT fix your computer", other hilarious jokes and socks with logos of programming languages, code, etc.

⁹Such as socks that make your feet look like chicken's feet, or to fool people into thinking your feet are being eaten by infeasibly proportioned crocodiles.

4.2 Interest in Programming Socks

Google Trends [6] gave us some interesting insight into the widespread appeal of Programmer Socks. They are particularly of interest to Western countries (United States, Australia, United Kingdom) but also Eastern Europe (Poland, Russia) (See Figure 7).

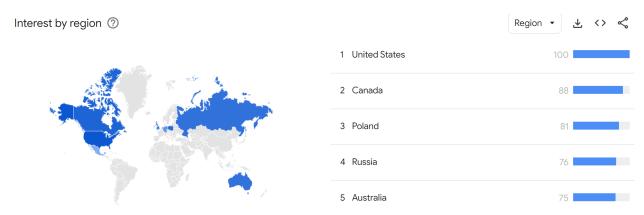


Figure 7: Interest in 'Programming Socks' in different countries

Programming Socks have become increasingly of interest since the early 21st century (2018) and continue to grow (Figure 8. As the world consistently increases the number of software developers in its population[7] and the benefits of Programming Socks become better known, this number will surely continue to skyrocket.

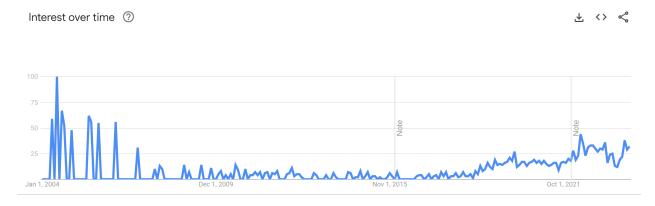


Figure 8: Popularity of the 'Programming Socks' search term over time (worldwide)

The data ten years prior to that inflection point is particularly interesting. Interest was much higher and varied in the years 2004-2006. We can only conclude that Programming Socks may have a deeper history than previously known, possibly a well guarded secret by the programming elite, or maybe a handful of developers in the know who made irregular spike purchases of huge orders in order to save on shipping costs.

5 References

References

- [1] Amazon.com: DRESHOW Extra Long High Thigh Socks Striped Over Knee Thin Tights Long Stocking. Available at: https://www.amazon.com/DRESHOW-Striped-Tights-Stocking-Warmer/dp/B096M3LMCT/ (Accessed: 27 January 2024).
- [2] Amazon.com: Programming Socks. Available at: https://www.amazon.com/programming-socks/s?k=programming+socks (Accessed: 27 January 2024).
- [3] Debugging, R.D. Rubber duck debugging, Rubber Duck Debugging Debugging software with a rubber ducky. Available at: https://rubberduckdebugging.com/ (Accessed: 27 January 2024).
- [4] KDESOCKS-bin/Lemmmmmmmmmysocks R/unixsocks (no date) reddit. Available at: https://old.reddit.com/r/unixsocks/ (Accessed: 27 January 2024).
- [5] (The quest for Programming Socks: R/brisbane reddit. Available at: https://www.reddit.com/r/brisbane/comments/urbq0c/the_quest_for_programming_socks/ (Accessed: 27 January 2024).
- [6] Programming Socks Google Trends. Available at: https://trends.google.com/trends/explore?date=all&q=programming%20socks&hl=en (Accessed: 27 January 2024).
- [7] Number of software developers worldwide in 2018 to 2024 https://www.statista.com/statistics/627312/worldwide-developer-population/(Accessed: 27 January 2024).