

Inventors: Please complete and submit to patents@linkedin.com.

Submission Date	Wednesday, May 23, 2018		
Invention Title A working title	Leveraging Social Graph to Perform Account Recovery		
Inventors List all (and only) individuals who conceived the idea or invention	Name (Full Legal, if known)	Email Address (personal email if no longer at LinkedIn)	LinkedIn Team
	JuanJuan Hu	jahu@linkedin.com	LinkedIn Learning
	Kirsten Rauffer	krauffer@linkedin.com	Data Analytics
	Derek Koh	dkoh@linkedin.com	Data Analytics
	Yi Qun Zhou	yqzhou@linkedin.com	Data Analytics
LinkedIn Product or Feature e.g., Feed, Sponsored Updates, Jobs, TalentSolutions, PYMK, JYMBII, GYML...	Trust & Security - Account Access & Recovery under NAPE (No Access to Primary Email)		
Links Wiki URL, "go/" link, etc.	Link to Presentation Mock to Prototype		
Invention Status	Implementation Status	<input checked="" type="checkbox"/> Concept Only <input type="checkbox"/> Implementation in process <input type="checkbox"/> Implementation completed	
	Public Release Date	TBD	
	Public Disclosure before Release Date	None	

<p>Prior Art</p> <p>What problem(s) does this invention address? List prior solutions developed by others that you are aware of.</p>	<p>Every year, there are 60 million users who cannot remember their passwords to login to LinkedIn. They produce 3 million cases where they cannot reset their passwords because they no longer have access to their primary emails. For example, using a college email address but it was deactivated upon graduated or using work email address but it was deactivated upon switch companies.</p> <p>In such cases, LinkedIn allows you to change your primary email but you have to upload a Photo ID for a manual verification. This friction results in 97% of members giving up and leaving LinkedIn. Of the remaining 3%, it costs LinkedIn 5 dollars to process a case and it takes customer service rep 2 days to manually validate.</p> <p>Our invention will improve customer experience and reduce customer support cost for LinkedIn.</p> <p>Here is a list of prior art developed by others that we are aware of:</p> <ul style="list-style-type: none"> • In 2017, Trust engineer team implemented a scoring framework to auto-approve NAPE cases. If cases are auto approved (~40%), ticket will be closed automatically and users will get the password reset link via new supplied email. For other 60% cases, manual review is still needed. <p>Back in 2014, vendor Jumio was introduced to auto verify ID. Only after Photo ID uploaded by members passes the verification, a NAPE case will be opened and reviewed. This can reduce case volume but compromise user experience in that members with Jumio denial cannot proceed for account recovery.</p>
<p>Advantages</p> <p>particularly technical advantages, over prior solutions / technologies, (e.g., faster, better usability, scalability, improved efficiency)</p>	<p>This invention would no longer require the user to manually upload a Photo ID when they are trying to retrieve their LinkedIn account. This causes large amount of friction (97% drop off) to the NAPE flow and is prone to loop holes where someone could use a stolen ID to retrieve a LinkedIn account.</p> <p>This invention has a two factor authentication. For the first authentication, a person has a 1 in 3 million chance of actually guessing it right, which is 3 times more secure than FaceID. The second authentication requires the account retriever to be in touch with one of the three trusted contacts and be able to retrieve a 6 digit code.</p>

Description

How does the invention operate to provide the advantages described above? Please also provide or identify any documents that you have that describe the idea/invention/technology (including Wiki links).

Selecting

- Invention will use the power of your network to reset their linkedIn account
- A member will select 3 contacts whom they would like to be their "Trusted Contact." A notification will then be sent to the trusted contact, letting them know they have been appointed as such.
- Members will be presented with 12 profile pictures and have to pick out the picture that is their trusted contact and also provide the name of the person. 11 of those profiles pictures that they are shown will be a combination of connections they have a strong connections with as well as connections they have a weak connection with. This is done 3 times to minimize the probability of guessing correctly.
- The invention will then send a LinkedIn notification to the trusted contact and an offline communication between the trusted contact and the members to exchange a 6 digit security pin ensures an additional security.

The member can now use the pin for resetting their email and password, and logging in.

