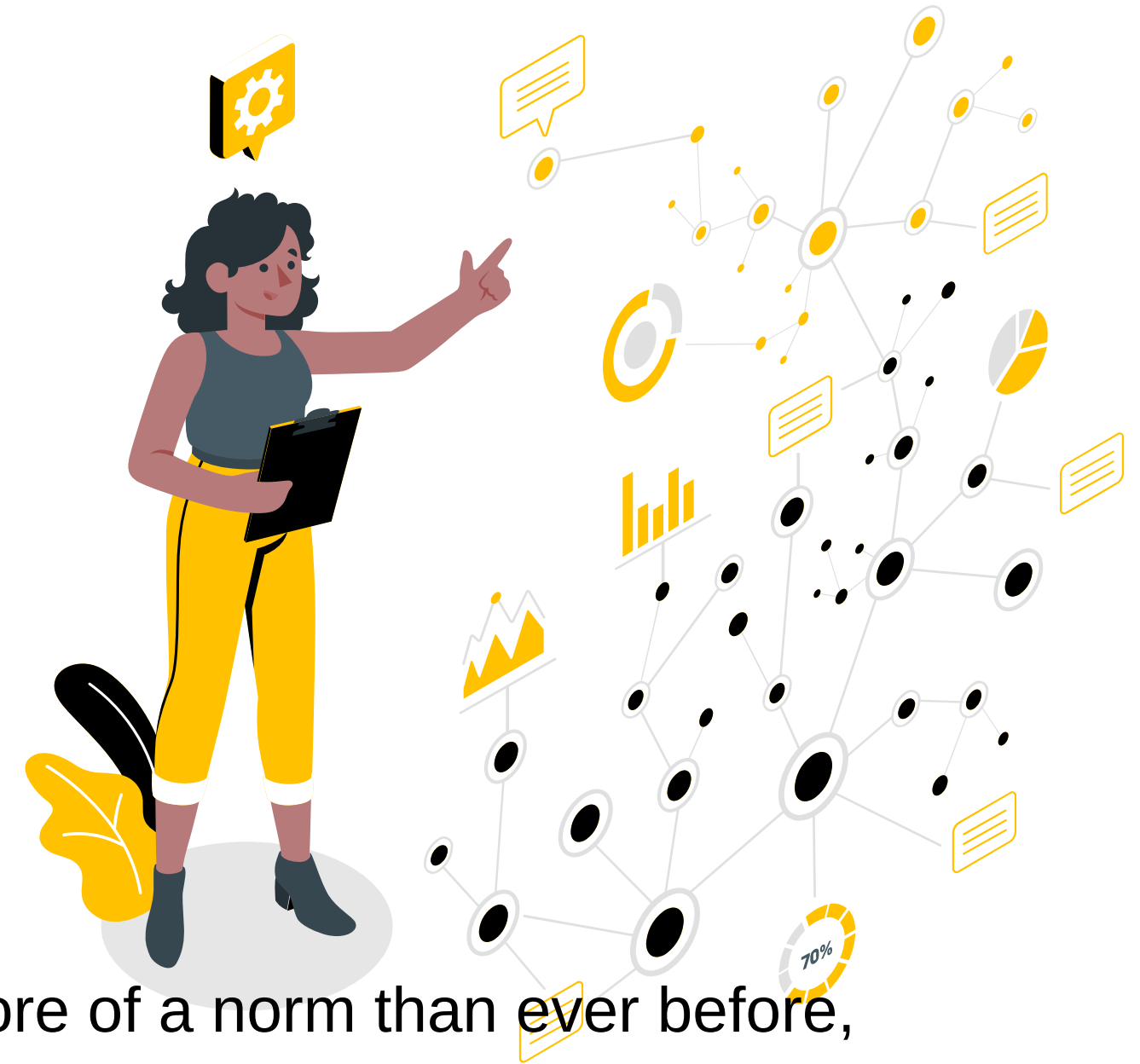# Silicon Rush Proposal

SILICOVENGERS

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PES UNIVERSITY
CELEBRATING 50 YEARS

IEEE COMPUTER SOCIETY
PES University Student Branch Chapter

G-KnowMe

INSPIRATION

The digital era has become more of a norm than ever before, pushed further by the pandemic. Digital records of health reports enable an efficient tracking of medical history with ease allowing access anytime and anywhere, both for the individuals and medical professionals. Analysis of test results and data collection is faster if the medical records are digitized and tracked over a period of time.

Novelties

1.End -End Image Preprocessing and OCR
2.Generality of the system-Even a PDF can be uploaded and the system converts it to jpg format.
3.Encrypted storage of '.csv' records using a random key generated at every session.
4. Website stores details for 6 different classes of lab reports.
5.User Login /Authentication using SQL Alchemy.

Requirements

Software stack

Python
Flask
Open cv
Tensorflow
Pillow

Deployment

- We reached out to a few clinical labs and found out that a system which helps to organize medical reports would be very helpful.
- The proposed system will help the users to keep track of their clinical test reports thereby keeping an eye on their health.
- Our application can be deployed on a domain and hence can be easily accessed by people around the globe.
- **End-End image preprocessing,Encrypted storage and the categorical dashboard** provide an edge to our application over other solutions.

Clinical Lab

Senior citizens

Pitching our product

PRODUCT: Our product uses state of the art functionalities to extract text from image even if the images aren't very clear.Our future work would include rewarding users through crypto coins which can be redeemed and can be earned when he achieves his personal goals

PLACE: This product aims to bridge the technological gap between the clinical labs and the patients.Hence we believe product fits in to the consumer market.

PROMOTION: Drawing lines from the success of apps like Healthify.Me ,we face a similar situation in promoting our model through social media websites,digital advertising .

Results-Image preprocessing

Dr Lal PathLabs

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Tel: 011 - 3040-3210, Fax: 011 - 3040-3204
E-mail: lalpathlabs@lalpathlabs.com Web: www.lalpathlabs.com

L46 - WHITEFIELD LAB HOME VISIT
SY NO. 18/1B, K R PURAM, HOBLI, SREE SAI
HARSHA TOWER, WHITE FIELD

(Hony) Brig. Dr. Arvind Lal
M.B.B.S., D.C.P.

Dr. Vandana Lal
M.D (PATH), IFCAP
Chief of Pathology

Lab No.	1481677	Age: 45 Years	Gender: Male	Collected	: 12/9/2019 8:53:00AM
A/c Status	: P	Ref By : SELF		Received	: 12/9/2019 1:18:42PM
				Reported	: 12/9/2019 5:16:08PM
				Report Status	: Final

Test Name	Results	Units	Bio. Ref. Interval
KIDNEY PANEL; KFT,SERUM (Spectrophotometry, Indirect ISE)			
Urea	31.00	mg/dL	14.9 - 38.5
Creatinine	1.35	mg/dL	0.67 - 1.17
Uric Acid	5.80	mg/dL	3.50 - 7.20
Calcium, Total	8.90	mg/dL	8.80 - 10.60
Phosphorus	2.80	mg/dL	2.40 - 4.40
Alkaline Phosphatase (ALP)	96	U/L	30 - 120
Total Protein	6.40	g/dL	6.40 - 8.30
Albumin	3.83	g/dL	3.50 - 5.20
A : G Ratio	1.49		0.90 - 2.00
Sodium	136.00	mEq/L	136.00 - 146.00
Potassium	3.60	mEq/L	3.50 - 5.10
Chloride	101.00	mEq/L	101.00 - 109.00

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Result

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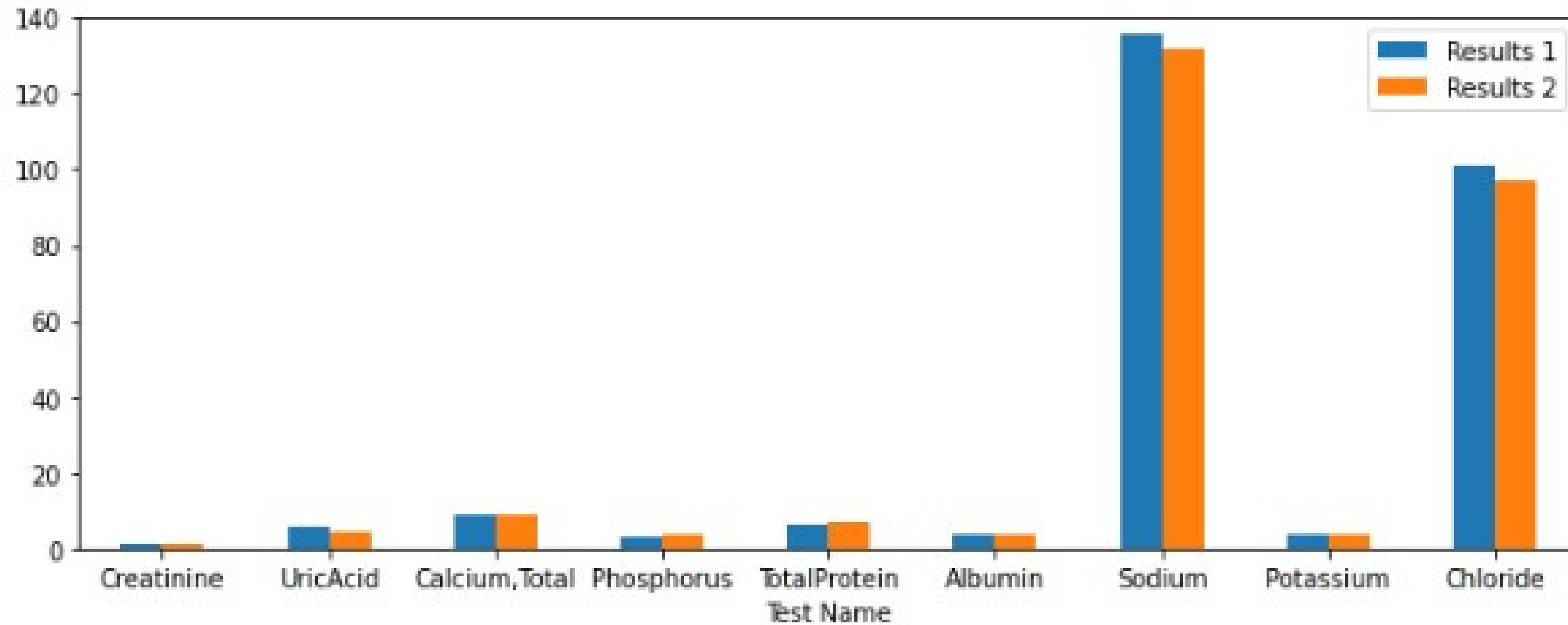_ S-naik Wipatiehs@etatrtans com,

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Page 1 of 2

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	A	Test Name	Results	Units	LowRange	HighRange
1		Test Name	Results	Units	LowRange	HighRange
2	0	Creatinine	1.35	mg/dL.	0.67	1.17
3	1	UricAcid	5.8	mg/dL	3.5	7.2
4	2	Calcium,To	8.9	mg/dL	8.8	10.6
5	3	Phosphoru	2.8	mg/dL	2.4	4.4
6	4	AlkalinePh (ALP)		96 U/L	-	
7	5	TotalProte	6.4	g/dL	6.4	8.3
8	6	Albumin	3.83	g/dL	3.5	5.2
9	7	A:G	Ratio	1.49	0.9	2
10	8	Sodium	136	mEq/L	136	146
11	9	Potassium	3.6	mEq/L	3.5	5.1
12	10	Chloride	101	mEq/L	101	109

Results

Bibliography

https://drive.google.com/drive/folders/12xZ5Qw9aGd6IDVbfF3_9vCNbAipkRKVw?usp=sharing