We use tech to connect human potential and opportunity with dignity & humility.

ANNUAL REPORT
ReDI School NRW DCP Autumn 2020
Contact: takuya@redi-school.org
The challenge

- North Rhine-Westphalia (NRW) is home to more than 5 million people with migration background

- NRW receives 21.14% of all asylum seekers in Germany

- Almost one out of 4 migrants is unemployed in NRW - only 6.8% of German nationals are unemployed

- NRW is the land with the most open job vacancies in Germany

Open job positions in Germany in 2018 (by percentage)

*Sources
- Ministerium für Kinder, Familie, Flüchtlinge und Integration, 2017. Integrationsmonitoring NRW
- Statista.com, 2018. Verteilung der offenen Arbeitsstellen in Deutschland nach Bundesländern im Jahr 2018
The solution

**What**
ReDI is a **tech** school connecting human potential with new opportunities.

**How**
We are a **community** of staff, students, alumni, volunteers & partners, who **co-creates** digital education concepts, in **dignity and humility**.

**Why**
Together, we **break down barriers** and accelerate **job market integration**!
NRW school overview

- ReDI School NRW
  - Digital Career Program
    - Courses
    - Career Support
  - Kids & Youth Program Duisburg
    - Courses in schools
    - Workshops with external partners
Digital Career Program
ReDI NRW
Digital Career Program concept

**Who**
- 660 students by 2023
  - Min. 50% women
  - Min. 50% forced migration background

**What**
- High-end tech skills needed in the market + Career Support

**How**
- 150 corporate volunteer teachers & volunteer teachers by 2023
- A course consists of 5 teachers and 10 – 15 students

**When**
- Evening courses (twice a week, 19:00 – 21:00)

**Where**
- Mainly online
We are ReDI!

ReDI NRW Kick-off Event

Digital Career Program: courses

Career Support: HR Summit
# Overview: numbers & impacts

## Digital Career Program

<table>
<thead>
<tr>
<th>Overview</th>
<th>Pilot Semester 2020</th>
<th>Goals by 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner:</strong> Microsoft, Accenture, Cisco, Handelsblatt Media Group</td>
<td><strong>53 students</strong></td>
<td><strong>660 graduates</strong></td>
</tr>
<tr>
<td><strong>34% women</strong></td>
<td><strong>34% women</strong></td>
<td><strong>min. 50% women</strong></td>
</tr>
<tr>
<td><strong>18 nationalities</strong></td>
<td><strong>160 lesson hours</strong> in 10 weeks</td>
<td><strong>min. 50% with a forced migration background</strong></td>
</tr>
<tr>
<td><strong>Course offers</strong></td>
<td><strong>80 participants</strong> in the kickoff event</td>
<td><strong>150 teachers (corporate and volunteers)</strong></td>
</tr>
<tr>
<td>- High-end tech skills needed in the market</td>
<td><strong>3 career workshops</strong></td>
<td></td>
</tr>
<tr>
<td>- Career support through workshops and mentorship</td>
<td><strong>1 HR summit + job fair</strong></td>
<td></td>
</tr>
<tr>
<td><strong>28 Teachers</strong></td>
<td><strong>1 Demoday</strong></td>
<td></td>
</tr>
<tr>
<td><strong>20 mentors</strong></td>
<td><strong>4 courses:</strong> Networking Fundamentals, Introduction to Python, HTML and CSS, Web Design Fundamentals</td>
<td></td>
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<tr>
<td><strong>20 mentees</strong></td>
<td></td>
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</table>
Timeline Autumn 2020

August
- Students open days
- Curriculum plannings

September
- Screening

October
- Teacher’s training
- Cyber Safety Workshops
- Kickoff 2nd Oct.

November
- 4 Courses 5th Oct. – 10th Dec.
- Evalu. with Students
- Evalu. with teachers

December
- Demo-day
- Career workshops
- Mentorship
Student requirement

**Technical knowledge**
Basic use of computer (eg. email, web browser, MS Word, Excel, PowerPoint)

**Language**
English B1 level (speaking, listening and writing)

**Technical setup**
A laptop with internet connection*
*Redi offers free laptop rental and a use of a learning space with internet (office from a partner) in Düsseldorf

**Age**
From 17 years old (this program is not for kids and youth)
Learning space & ReDI NRW office

Handelsblatt offered us 2 desks for the ReDI team at their office building in Düsseldorf. In the evening, students are allowed to use their Townhall space.
DemoDay

- The OSI model to describe how computer systems communicate
  1. Physical layer: cables
  2. Data link: MAC addresses, switching, Ethernet
  3. Network: IPv4, routing, subnetting
  4. Transport: TCP, UDP (transport protocols)
  5. Session
  6. Presentation: encryption
  7. Application: HTTP

- Hot topics:
Courses
Courses with 4 tracks

**VOLUNTEER TAUGHT COURSES**

- **Web Development**
  - Beginner: HTML & CSS
  - Intermediate: JavaScript + Project
  - Advanced: React + Project

- **User-centered Design**
  - Beginner: Web Design Fundamentals
  - Intermediate: UX Design + Project
  - Advanced: UI Design + Project

**CORPORATE TAUGHT COURSES**

- **Data Science**
  - Introduction to Python
  - Data Analytics + Project
  - Machine Learning + Project

- **Cloud and Infrastructure**
  - Networking Fundamentals
  - IoT + Project
  - Cloud + Project

**Cyber Safety Workshops (12 hours)**

**Beginner**
- Duration: 4 months (1 semester)
- Lesson: 2 lessons per week
- Preparation: Cybersafety workshop (1 month)

**Intermediate** (not yet available)
- Duration: 4 months (1 semester)
- Lesson: 2 lessons per week
- Project: 1 project in semester

**Advanced** (not yet available)
- Duration: 4 months (1 semester)
- Lesson: 2 lessons per week
- Project: 1 project in semester

**Career Support**
- Duration: 4 months (1 semester)
- Lesson: 2 lessons per week
- Project: 1 project in semester
## Course contents

### Data Science track

**Introduction to Python**  
Mon & Wed, 19:00 – 21:00  
Writing your own code; learn how to use documentation and third party libraries; read code; solve a problem with Python; develop their own code; mixing data types; learn GitHub.

### Cloud and Infrastructure track

**Networking Fundamentals**  
Tue & Thu, 18:30 – 20:30  
Learn architecture, structure and functions of computer networking.  
Configure a network yourself, such as a simple LAN (Local Area Network).

### Web Development track

**HTML and CSS**  
Tue & Thu, 19:00 – 21:00  
Use a VSCode (desktop editor), Codepen (online editor).  
Create a website (teachers suggest several website examples).  
Use git as optional (push/pull).

### User-centered Design track

**Web Design Fundamentals**  
Mon & Wed, 19:00 – 21:00  
Redesign a website and present the design concept at the end of the semester.  
Learn the use of design tools and methods, while they progress their design on a website.
## Course growth

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Community</th>
<th>Course examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep – Dec</td>
<td>2 Corporate 2</td>
<td>40 Students 10</td>
<td>HTML &amp; CSS Web</td>
</tr>
<tr>
<td>Pilot Semester</td>
<td>Volunteer</td>
<td>Corporate Volunteers 10 Volunteers</td>
<td>design Intro to Python Net fund.</td>
</tr>
<tr>
<td>Mar – Jul</td>
<td>2 Corporate 2</td>
<td>60 Students 10</td>
<td>HTML &amp; CSS Web</td>
</tr>
<tr>
<td>Semester #1</td>
<td>Volunteer</td>
<td>Corporate Volunteers 10 Volunteers</td>
<td>design Intro to Python Net fund.</td>
</tr>
<tr>
<td>Sep – Dec</td>
<td>4 Corporate 4</td>
<td>120 Students 20</td>
<td>HTML &amp; CSS Web</td>
</tr>
<tr>
<td>Semester #2</td>
<td>Volunteer</td>
<td>Corporate Volunteers 20 Volunteers</td>
<td>design Intro to Python Net fund.</td>
</tr>
<tr>
<td>Mar – Jul</td>
<td>6 Corporate 6</td>
<td>160 Students 30</td>
<td>HTML &amp; CSS Web</td>
</tr>
<tr>
<td>Semester #3</td>
<td>Volunteer</td>
<td>Corporate Volunteers 30 Volunteers</td>
<td>design Intro to Python Net fund.</td>
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<td>Sep – Dec</td>
<td>6 Corporate 6</td>
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<tr>
<td>Semester #4</td>
<td>Volunteer</td>
<td>Corporate Volunteers 30 Volunteers</td>
<td>design Intro to Python Net fund.</td>
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<td>Mar – Jul</td>
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<td>Semester #5</td>
<td>Volunteer</td>
<td>Corporate Volunteers 30 Volunteers</td>
<td>design Intro to Python Net fund.</td>
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Impact
Application process

- Interested: 101
- Applied: 58
- Interviewed: 53
- Enrolled: 53
Impact

73.5% of the students had completed the semester.

13 students had earned an industry-recognized certification or credential.

5 students were employed after program completion of the semester. 1 of them were employed in tech or tech-enabled roles.
Student Demographics
Net income per month

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Less than 1,200 €</td>
<td>84.9%</td>
</tr>
<tr>
<td>1,200 – 1,700 €</td>
<td>5.7%</td>
</tr>
<tr>
<td>Above 1,700 €</td>
<td>3.8%</td>
</tr>
<tr>
<td>No answer</td>
<td>2%</td>
</tr>
</tbody>
</table>

n = 53

Summary:

- 45 people have a net income less than 1,200 €
- 2 people have a net income between 1,200 – 1,700 €
- 3 people have a net income above 1,700 €
- 2 people did not answer
Nationality of interviewed students

- Nigeria: 34
- Pakistan: 2
- Ethiopia: 1
- Myanmar: 1
- Syria: 2
- Cameroon: 1
- Bangladesh: 1
- China: 1
- Germany: 1
- Ghana: 1
- India: 1
- Iran: 1
- Italy: 1
- Netherland: 1
- Poland: 1
- South Korea: 1
- Ukraine: 1
- Vietnam: 1

Highlighted based on the reference on Bundeszentrale für politische Bildung, Konfliktporträts: https://www.bpb.de/internationales/weltweit/innerstaatliche-konflikte/54568/konfliktportraets
Visa status of interviewed students

- Student Visa: 35
- EU citizenship: 5
- Permanent Residency Permit: 3
- EU Blue Card: 2
- Family Reunion Visa: 2
- Working (Employment) Visa: 2
- Applied for asylum: 1
- Family member of an EU citizen: 1
- Humanitarian residency permit or approved asylum document: 1

n = 53
Gender

Status on 2nd October

n = 53

18 women

35 men

Men 66.0%

Women 34.0%
Profile

Occupational Background

35  Student at university
6   Unemployed and looking for a job
6   Working part-time
5   Working full-time

Area of studies

Applied Geosciences
Automation and IT
Business IT
Business Law
Computer Science
Humanities and Arts
IT Communication Technology
Pharmaceutical Technology
Renewable Energy Systems
Science (Biology, Chemistry, Physics)
Urban Transformation
Resource Engineering
Social Science
Urban Landscape
Urban transformation
Creating Role Models
ReDI alumni started their careers as...

Mohammad ServiceNOW Developer Accenture
Rami Full-stack Developer kloeckner.i
Rita Solutions Systems Engineer Cisco
Omar Founder of the App Bureaucrazy
Abdulsalam Start up! Trainee Deutsche Telekom
Amro IT Consultant Accenture
Natalia Web Designer Ellusion
Mohamed Azubi Fachinformatiker ProSiebenSat.1

Abdullahi Software Engineer Moxa Ada Fellowship Allianz
Idilir IT Support Specialist / Microsoft 365 Beck et al.
Parisa Data Scientist MHP - Porsche
Ferdaus Netzwerk-Admin. Intel / Experis
Sajjad Software Engineer Amazon
Amr Blockchain Developer Capgemini
Tung Developer Associate SAP
Yasaman Business Analytics working student Kloeckner.i
Zaid is a real role model. In the ReDI School IoT class, he discovered his passion for mixed reality. Supported by Microsoft, he rebuilds the ancient city of Palmyra, Syria, which was destroyed by the IS – virtually in 3D. At TEDx München he brought his story and project in a live demo on stage.

Watch here.
Thank you from NRW team!

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